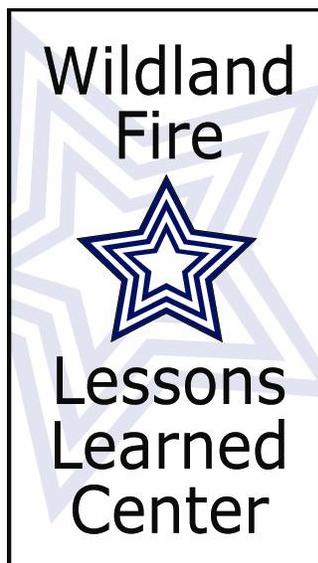


2004 Hurricane Response

Initial Impressions Report (IIR) from Hurricanes
Charley, Frances, and Ivan

For:
Wildland Fire Lessons Learned Center
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December 6, 2004

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Introduction

The only thing that remains the same is that it is different every time we do this.
- First Interviewee – repeated many times by others

Between August 12 and September 26, 2004, six tropical weather systems made landfall on the shores of the southeastern USA. Four were hurricane strength when they arrived (75 MPH or greater). In two weeks, they ravaged central and northern Florida as well as southern Alabama. They set into motion a national disaster response effort unprecedented in the history of modern emergency management.

Over the two-month period stretching from mid-August through mid-October, approximately 1,900 personnel from the wildland fire community were committed to this hurricane response effort, including 14 of the nation's 17 Type 1 Incident Management Teams (IMTs), all four Area Command Teams, and all 12 national Buying Teams. The effort was considered the largest application of the Incident Command System to a natural disaster response. At its height, two Area Command Teams and eight Type 1 IMTs were fielded to manage mission assignments under the Federal Emergency Management Agency (FEMA), which included the management of base camps, special needs facilities, logistics staging areas, and receiving and distribution centers. Based upon the information released by the upper management of the Department of Homeland Security (DHS), FEMA and the U.S. Department of Agriculture (USDA), the hurricane response effort of 2004 was considered a success on both organizational and political levels.

While on an organizational level the effort was deemed successful, the reported ground experience varied widely. Some of the "successes" reported in the field were likely influenced by political or personal agendas, which is not uncommon in such sweeping and politically charged events. Generally, greater success was reported by personnel who participated in the latter weeks of the response than from those who took part in the first weeks. Most respondents in the latter phases of the effort reported success in crafting order from chaos and in delivering the goods to those in need. A majority of respondents reported facing huge organizational and political hurdles.

One of the first (and then repeated) phrases during the collection effort was, "*The only thing that remains the same is that it's different every time.*" Respondents reported widely that there was little in the form of procedures, systems, or processes to work with prior to or upon arrival, and that the events were driven as much by personalities and luck as they were guided by standardization.

Nearly everywhere that success was reported, it had usually been preceded by a series of failures and frustrations. Many respondents only reported failure and frustration as differing policies, relationships, practices, doctrine, and undefined or poorly reconciled visions produced widely varying problems. In attempting to resolve them, wildland fire personnel sometimes took disparate and unpredictable actions. In most cases, most job stress and frustrations resulted from poor organizational alignment and an inability to act, rather than anything resulting directly from the disaster itself. Managing and correcting these problems, when possible, sometimes took nearly super-human efforts by agency personnel trying to provide aid and comfort to the populace. Many of the wildland personnel who did not get assigned to meaningful or productive

assignments became deeply discouraged and depressed, vowing not to accept such assignments in the future.

Respondents emphasized the virtues of patience, professionalism, adaptability and flexibility as keys that kept them functional and positive throughout the experience. During the interviews, leaders continually stressed the importance of building and maintaining positive relationships as a core competency.

At the roots of these challenges are two organizations—FEMA and Interagency Wildland Fire—both very invested in their own systems and processes, both attempting to understand how they fit together and can help each other in a new, all-risk world.

Although all respondents did not succeed in their response activities, all were dedicated to the process of learning and improving based upon their experiences. Yet, few “tactical” lessons, recommendations, or practices captured by the ICT are new. Most have been documented in prior reports or reviews of hurricane response efforts, many on account of a strong conviction that “...we shouldn’t have to keep going through this again.” Many respondents expressed doubt that the contents of this report would make any difference. Most believed that the solutions that came out of previous reports were rarely implemented as a standardized practice, or at best, were implemented by just a few individual IMTs.

Apart from this general report, IMTs, Buying Teams, and other groups will be conducting more detailed After Action Reviews on their part of this response effort. Together, all these reports should provide a basis from which to plan further action.

The Information Collection Effort

In mid-September 2004, the United States Forest Service (*USFS*) Southern Regional Office invited the Wildland Fire Lessons Learned Center (*LLC*) to collect lessons and initial impressions from the deployed wildland fire resources participating in the response effort for hurricanes Charley, Frances, and Ivan. The Information Collection Team (*ICT*) was on site in Atlanta, GA, Florida, and Alabama, from September 12 through 20, 2004. The team primarily interviewed IMT staff and regional operations personnel. The purpose of this collection effort was to prepare future all-risk response teams, gather information for training, document agreed upon best practices, identify knowledge gaps, and illuminate issues of strategic or organizational significance. It focuses on the data collected during an eight day “snapshot” while the ICT was on site. As an IIR, it does not represent the experiences of all participating IMTs, nor does it speak to the Federal Emergency Management Administration (*FEMA*) beyond its interface with wildland fire resources during this series of incidents.

The Wildland Fire Lessons Learned Center would like to thank the respondents for the time and effort spent with the information collection team members and for the education they provided during this effort. We especially thank the USFS Southern Regional Operations staff for their critical support and education during the collection process.

Report Organization

This report has been organized into three sections:

Section 1 – Situation Description is context for readers who are unfamiliar with the details of the 2004 Hurricane Response effort.

- To assist readers who are not familiar with the FEMA organization, hurricane response efforts, the United States Forest Service (*USFS*) and other national fire agencies working under Emergency Support Function #4 in the Federal Response Plan, a quick overview is contained in: ***Overview of Wildland Fire’s Role in Disaster Relief Operation.***
- For those readers not familiar with the 2004 hurricanes that set off the national response relating to this report, there is a brief overview of each hurricane and a sequence progression in: ***The 2004 Hurricanes.***

Section 2 – Initial Impressions contains impressions and preliminary conclusions derived from discussions with multiple sources. These are loosely organized according to the following categories:

- ***Regional Operations and Coordination***
- ***Emergency Support Function (ESF) #4***
- ***Incident Management Team Operations***
- ***FEMA and ICS***
- ***Area Command***
- ***Global Impressions***

Section 3 – Issues for Organizational Leaders is dedicated to illuminating the foundational issues that serve to produce problems and confusion during the response.

Information Collection Team

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Data Analysis and Report

The analysis of the raw data collected by the Information Collection Team was fielded by the Wildland Fire Lessons Learned Center (*LLC*). Mission-Centered Solutions, Inc. (*MCS*) completed this report under contract to the LLC. The summations and conclusions contained herein are MCS's. The content of this report is the property of the Wildland Fire Lessons Learned Center to use in whole or in part.

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Section 1: **Situation Description**

Wildland Fire's Role in Disaster Relief Operations

The Federal Emergency Management Organization (FEMA)

Many respondents reported that one of the largest “hurdles” in the disaster response was understanding what FEMA is and how it operates in the narrow scope of incident management response and wildland fire. This section briefly describes the history and functions of FEMA to provide context for the lessons and impressions documented in this report.

FEMA History

Following President Carter's 1979 executive order, the federal government merged many of the separate disaster-related responsibilities into a new Federal Emergency Management Agency. It absorbed a number of other agencies: the Federal Insurance Administration, the National Fire Prevention and Control Administration, the National Weather Service Community Preparedness Program, the Federal Preparedness Agency of the General Services Administration, and the Federal Disaster Assistance Administration activities from the Department of Housing and Urban Development. In addition, civil defense responsibilities were transferred to FEMA from the Defense Department's Defense Civil Preparedness Agency.

The migration to emergency management and response began in 1993, when President Clinton appointed James L. Witt as the first agency director with experience as a state emergency manager. He initiated sweeping reforms that streamlined disaster relief and recovery operations; insisted on a new emphasis regarding preparedness and mitigation; and focused agency employees on customer service. The end of the Cold War also allowed Witt to redirect more of FEMA's limited resources from civil defense into disaster relief, recovery, and mitigation programs.

The terrorist attacks of September 11, 2001, caused another redirection in agency development. These attacks changed FEMA's focus toward issues of national preparedness and homeland security, as well as tested the agency in unprecedented ways. The agency began coordinating its activities with the Department of Homeland Security (*DHS*) and its Office of National Preparedness was given responsibility for helping to ensure that the nation's first responders were trained and equipped to deal with weapons of mass destruction.

In March 2003, FEMA, along with 22 other federal agencies, was rolled into DHS. Today, FEMA is one of four major branches of DHS with about 2,500 full-time employees in the Emergency Preparedness and Response Directorate, supplemented by more than 5,000 stand-by disaster reservists.

FEMA's activities are implemented in all phases of the "disaster cycle": response, recovery and mitigation, risk reduction, prevention, and preparedness.



FEMA as a Response Organization

FEMA gets involved in an incident when state and local governments are overwhelmed and make a request for federal aid through a presidential disaster or emergency declaration. FEMA's response usually involves these kinds of activities:

- Mobilizing and positioning emergency equipment
- Getting people out of danger
- Providing the necessary food, water, shelter, and medical services
- Bringing damaged services and systems back on line

All these activities are conducted through Emergency Support Functions (*ESF*), which act as liaisons to the various agencies that provide resources. Typically, federal assistance is financial.

In an operational framework, FEMA does very little directly with its own staff. The agency possesses a number of trailers and some communication equipment. These trailers, however, are generally used during the first part of pre-staging to carry water and ice. FEMA personnel are mostly reservists, pulled in on an as-needed basis. FEMA is more important as a force multiplier, bringing together many agencies and private firms to coordinate the response, pay for goods and services, provide damage assessment intelligence (both pre-and-post-event), lay the groundwork for the recovery efforts to follow, and provide the required financial assistance. As a response organization, FEMA is primarily a "push" responder, placing resources in the pipeline to be pushed out into the field.

The Federal Response Plan

The federal government may be asked to mobilize resources from any number of federal agencies and to participate in the response. These requests activate the Federal Response Plan. Under the response plan, FEMA has congressional authority to compel other government agencies to assist with disaster response activities required to implement the plan.

Traditionally, FEMA focused on recovery and assistance. With the implementation of the Federal Response Plan, FEMA has been expanding its role to include direct response action and incident management. FEMA now calls upon federal wildland incident management teams (*IMTs*) to operate ground activities and it has even begun certifying urban search and rescue teams for FEMA deployment.

The National Response Plan is divided into sections that describe the activities of the federal response in the general areas of emergency support, recovery, and support. FEMA is responsible for implementing and coordinating the 27 departments or agencies involved in disaster response. FEMA directly owns very little resources and assets, but it is responsible for coordinating and paying for the use of other agencies' goods, services, and personnel.

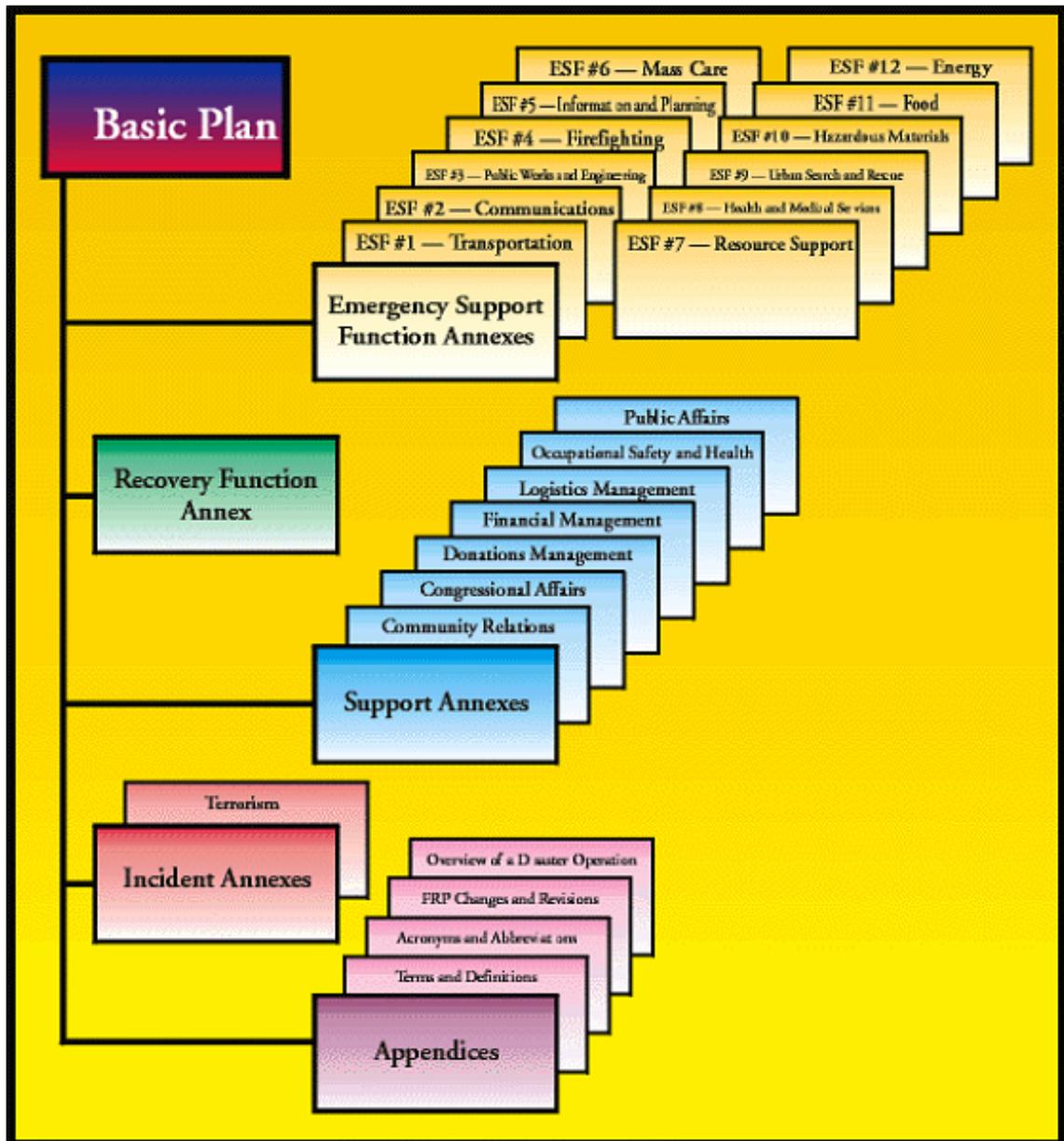
Overview - Wildland Firefighting and the Federal Response Plan

The U.S. Forest Service, through the Department of Agriculture, is the agency with the primary responsibility for firefighting under *Emergency Support Function (ESF) #4-Firefighting*. The national wildland fire agencies: the Bureau of Indian Affairs, Bureau of Land Management, National Park Service and Fish & Wildlife Service (as Interior agencies) have a supporting role under ESF#4. Beyond the federal wildland agencies, numerous state and local fire organizations are also tapped for response work under ESF#4 as supporting organizations. In this effort, the state emergency management organizations of Florida, Alabama, Georgia, Mississippi and Louisiana played primary roles in managing and directing emergency response and recovery efforts.

When federal firefighters are mobilized under FEMA, it has typically been under the ESF#4 designation regardless of the actual mission requirements or assignment, whether it be September 11, space shuttle recovery, exotic disease control, or other events. The USFS is specifically designated as the primary response agency under ESF#4 Firefighting, but involves other supporting agency personnel through the wildland fire response systems, such as the National Interagency Coordination Center (*NICC*) and the National Wildfire Coordinating Group (*NWGC*).

Federal Response Plan Organization

<p>Emergency Support Functions</p>	<p>Mission, policies, concept of operations, and responsibilities of the primary and support agencies involved in the implementation of key response functions that supplement state and local activities.</p>	<p>ESF#1: Transportation ESF#2: Communications ESF#3: Public Works and Engineering ESF#4: Firefighting ESF#5: Information and Planning ESF#6: Mass Care ESF#7: Resource Support ESF#8: Health and Medical Services ESF#9: Urban Search and Rescue ESF#10: Hazardous Materials ESF#11: Food ESF#12: Energy</p>
<p>Recovery Functions</p>	<p>Policies, planning considerations, and concept of operations that guide the provision of assistance to help disaster victims and affected communities return to normal and minimize the risk of future damage.</p>	<p>Delivery systems: individuals, families, and businesses or to state and local governments.</p>
<p>Support Annexes</p>	<p>Mission, policies, and concept of operations of related activities required to conduct overall Federal disaster operations.</p>	<p>Community Relations, Congressional Affairs, Donations Management, Financial Management, Logistics Management, Occupational Safety and Health, and Public Affairs.</p>
<p>Incident Annexes</p>	<p>Mission, policies, concept of operations, and responsibilities in those specific events that require a unified response under the FRP, and one or more other Federal plans that implement authorities and functions outside the scope of the Stafford Act authority.</p>	



The Role of Wildland IMTs in Disaster Response

As well-coordinated and self-contained workforces, the wildland fire agencies can quickly provide “hands and eyes on the ground” to FEMA. Through the National Response Plan, the wildland agencies may be tasked with firefighting under ESF#4, but in fact that is rarely, if ever, done. In reality, ESF#4 appears to be a mechanism to bring in the USFS and other wildland agencies, which in turn are given work assignments ranging from ground-debris searches to management of relief staging areas and medical relief centers (ESF-7, 8 etc.). Mission requests may come from FEMA operations or other ESF positions or agencies.

Goods and supplies for stricken locations arrive from many locations and many agencies. The supplies must then be stored, tracked, and delivered to numerous locations. Although FEMA’s response capabilities are formidable, it is neither organized nor equipped to handle the chaos this pressure produces on the response site. In past years, state National Guard units performed these logistical tasks.

FEMA respondents at the regional level commented that distribution of aid supplies has become more important as the drawdown on the state National Guard units has become more acute. In the eyes of FEMA respondents, the wildland fire agencies have become a new civilian army of workers available for hurricane-relief operations. For this reason, Incident Management Teams (*IMTs*) have been increasingly tasked during hurricane responses to manage the bottom end of the relief supply chain, managing regional staging areas and handling inventory and shipments of goods traveling to local distribution centers. The 2004 Hurricane Response effort was indicative of this focus. In addition, they may perform such diverse tasks as managing critical care centers or supporting Emergency Operations Centers.

Overview – the FEMA Hurricane Disaster Response Sequence

On any given day, the National Office of FEMA may be monitoring a variety of threatening situations across the country. For example, one day while this report was being written, FEMA was monitoring recovery efforts from the Florida hurricanes, an earthquake in California, a volcanic eruption in Washington, and the growing water shortage projection stemming from the drought.

Although all disasters are different, the following outline describes a representative sequence of events for a hurricane response.

1. Pending Disaster is Identified

When an emerging threat is identified, an Emergency Support Team (*EST*) from the Washington Office of FEMA begins strategic planning operations to prepare for response. This team, which includes representatives of all ESF functions, begins to pre-position resources to respond to the pending emergency. FEMA places resources through mission assignments managed through the ESF desks. Usually these mission assignments are for resources needed anytime a population is displaced (water, ice, beds, etc.). For example, the ESF#4 desk, staffed by the USFS, may receive an order to place an IMT on call because it is anticipated that the need will be there, even though the actual mission is still unknown.

2. FEMA Regional Response

If the situation progresses, a FEMA Regional Operations Center (*ROC*) is formed and begins spooling up to order and position responders, food, equipment and other resources based on an analysis of the population centers involved. Based on these assessments, FEMA begins issuing mission assignments. Mission assignments are placed at the regional office ESF desks by FEMA with the various agencies and departments who manage the needed supplies. This effort is conducted on "Surge" funds, which come directly out of the FEMA budget. Once the ROC is established, it assumes the work of the EST and the EST closes down.

During the surge, FEMA uses Geographic Information Systems and other technologies to determine the potential impact of the disaster and which response resources should be sent. For example, based on the expectation of future response work, the ESF#4 desk may receive a mission to activate an IMT for staging. The ESF#4 and USFS Regional Operations determine what resources should be ordered and where they should be staged. USFS Regional Operations maintains the ESF#4 desk at the ROC, provides care and feeding for the arriving IMTs, provides the needed staging support, and conducts preparation for other factors and preparations within the USFS region. When the IMT arrives it may be staged for future deployment or given a preparation mission as part of the surge effort.

3. Disaster Occurs

State and local resources respond to the emergency. If the local response system is overwhelmed or is expected to be overwhelmed, the Governor of the state issues a Declaration of Emergency to request federal assistance. Depending on where the hurricane is anticipated to strike, the ROC determines the logical locations for regional staging areas.

4. Presidential Declaration

Responding to the Governor's request for assistance, the President declares an emergency, releasing funds to FEMA to handle the emergency (subject to approval by Congress). All activities are then charged to Response funding appropriated by the President and Congress, not FEMA. A presidential declaration can occur before a disaster occurs.

5. Response

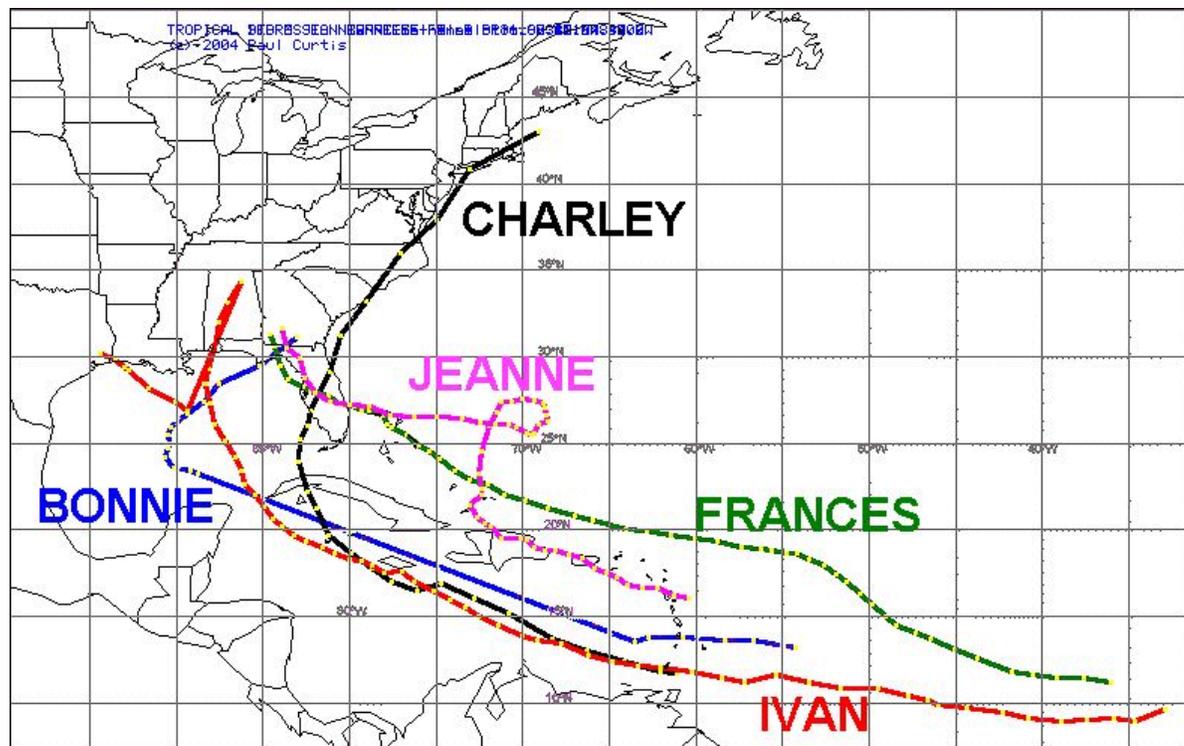
Once the location of the hurricane impact is known and damage assessment teams have provided an analysis of what is needed, the ROC establishes a Disaster Field Office (*DFO*) in the affected state to coordinate response activities. The disaster field office assumes responsibility for the response directly, with a full staff of ESFs. The ROC closes down once the disaster field office is established. The disaster field office stays in place as long as it is needed to support response and recovery activities and support the local Emergency Operations Centers. A disaster field office is established at a state level. Local distribution sites are determined and supplied from regional staging areas.

The ESF#4 at the disaster field office, together with USFS Regional Operations, tasks the IMT for a specific mission assignment based on need.

The 2004 Hurricanes

It is likely that the 2004 hurricane season will be recorded as the costliest in U.S. history, eclipsing Hurricane Andrew in 1992. The last time so many storms struck the same state in one season was 1886, when Texas took direct hits from four hurricanes. From August through September, northern Florida was struck by four hurricanes and one tropical storm, reaching beyond the capacity of both state and federal resources. Collectively, the U.S. Congress approved more than \$12 billion in federal relief aid in responding to the southeastern U.S. hurricanes at the time of this writing.

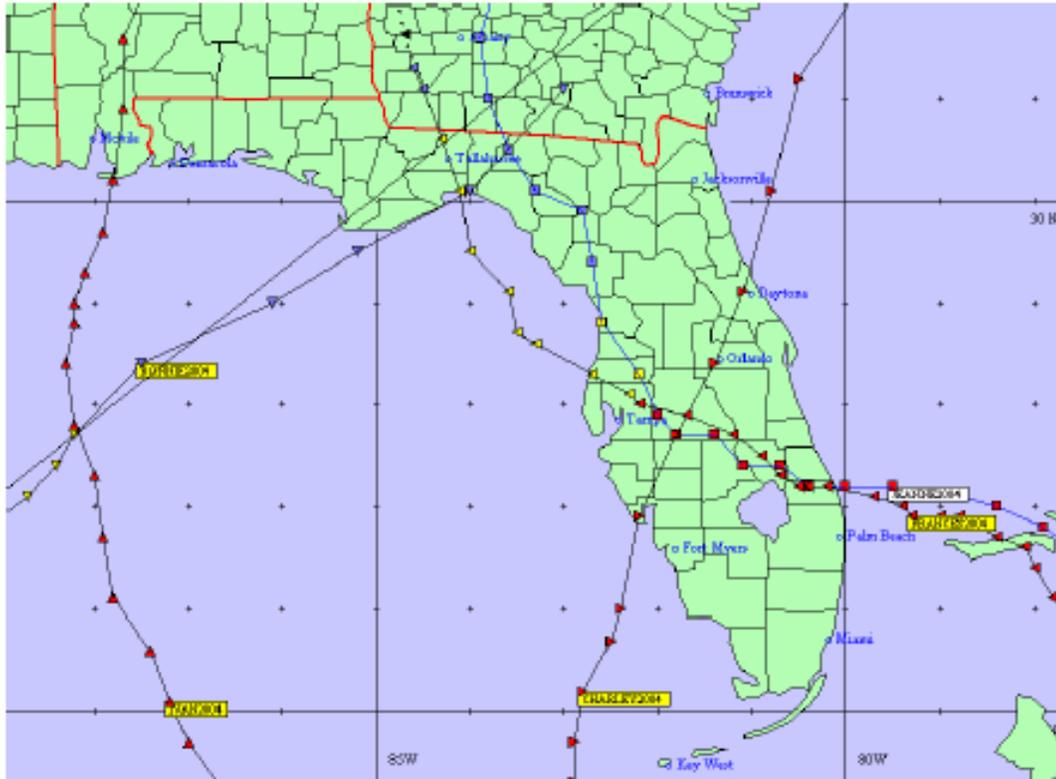
The Insurance Information Institute reported that it expects the industry to pay out more than \$21 billion in claims. Federal assistance in one form or another is expected to amount to an additional \$12 billion.



Hurricane Tracks of August and September 2004

Tropical Storm Bonnie

On August 12, 2004 at 1100, tropical storm Bonnie blew ashore near Apalachicola, Florida after forming just two and a half days earlier in the Gulf of Mexico. The storm brought 50 MPH winds and spawned some tornadoes and rain inland as it dissipated ahead of Hurricane Charley approaching from the south. State and local resources handled the response. FEMA, however, activated an Emergency Support Team in Washington D.C. and a Regional Operations Center (ROC) in southern Georgia on August 11 in anticipation of problems with Bonnie and Charley. Although Bonnie did not produce significant damage in itself, it did “pre-soak” northern Florida and Georgia with about four to six inches of rainfall prior to Hurricane Charley.



Detail of Hurricane Tracks Across the State of Florida August-September 2004

Hurricane Charley

On August 13, just 14 hours after Bonnie's landfall on the northern gulf coast of Florida, Hurricane Charley roared ashore near Punta Gordo, Florida with winds of 145 MPH. It crossed Florida from west to east and its wind speeds made it a Category 4 storm on the Saffir-Simpson Scale. A Presidential Disaster Declaration was issued on September 13. Charley forced the closure of the disaster field office in central Florida and the disaster field office was relocated to the ROC. FEMA approached the USFS R8 Regional Office to activate a Type-1 IMT to assist in Orlando, Florida. FEMA opened a disaster field office in Orlando on August 17. At the same time, FEMA replaced the previous FEMA Field Command Officer (*FCO*) at the disaster field office for lack of apparent progress. The ROC stayed active and moved inland to Atlanta, Georgia on September 16, in anticipation of future storms. The Area Command Team, which had been previously ordered by Regional Operations and was residing at the ROC, moved to the disaster field office in Orlando along with a Type 1 IMT to conduct recovery operations.

Florida officials estimated property damage to be \$14.5 billion and attributed another \$2.3 billion in losses to business interruptions. Insurance claims were expected to be nearly \$6 billion. Large citrus growers in the hardest hit counties of DeSoto, Hardee and Polk lost groves, barns, and equipment. In DeSoto, it is estimated that two-thirds of the orange crop was knocked off the trees.

FEMA requested three more Incident Management Teams in anticipation of Hurricane Ivan. The teams arrived in Atlanta about September 3.

Hurricane Frances

The center of Hurricane Frances hit the east coast of Florida with winds of 105 MPH (Category 2) in the early hours of September 5. The very large and slow moving storm dropped more than 13 inches of rain in some areas. It was the first time since 1995 that two hurricanes had hit the same state (in 1995, Hurricanes Erin and Opal hit Florida). The insured claims of Frances have been determined to be about \$4 billion. The storm caused 18 deaths in Georgia and Florida; and insured damage estimates between \$5 billion and \$15 billion.

While FEMA did not request IMT support for Charley, it did activate three IMTs for the Hurricane Frances response.

Hurricane Ivan

Ivan was at one point one of the most fearsome storms on record, packing winds of 165 MPH before losing strength prior to making landfall near Gulf Shores, Alabama on September 16. As Ivan approached landfall, Florida Lt. Governor Toni Jennings described it as "the size of Frances but [with] the impact of Charley."

Pensacola, Florida and nearby areas bore the brunt of the storm where it caused severe damage along the coast, adding to Florida's 2004 hurricane death toll, which then stood at more than 70 people. Early estimates put the damage from \$5 to 15 billion.

Hurricane Jeanne

After passing over Hispaniola and causing more than 1,500 flooding deaths in Haiti, Hurricane Jeanne appeared initially to be weakening as it moved northeast into the Atlantic, east of the Bahamas. After several days, the storm built up again to hurricane strength and after performing a complete loop over the open Atlantic, headed westward affecting the northern Bahamas and making landfall close to Stuart, Florida on September 25. Jeanne was the first major hurricane to make landfall north of Palm Beach, Florida and south of the Savannah River since 1899. Insured losses alone have been estimated at more than \$7 billion.

Pressures on the Reponse System

The rapid succession of the four hurricanes created unprecedented challenges both in scope and complexity for the state and national emergency response systems. By all accounts, handling the largest response operation in the agency's history stretched FEMA beyond its capacity. In many ways, it also pushed FEMA beyond its procedural and operational doctrine as well as its historical experience.

FEMA routinely handles many independent incidents simultaneously, usually in different regions of the country. The timing of the hurricanes caused multiple incidents to overlap the same area. The succession of the hurricanes forced FEMA to implement strategic planning for pending storms while it was dealing with response and recovery operations from the previous storms. In addition to the extraordinary stresses on its command and control systems, managing what was effectively four simultaneous incidents heavily taxed FEMA personnel. Not only were the FEMA personnel spread very thin, FEMA lacked guidelines for countering fatigue. FEMA respondents reported having worked more than 30 days straight, often for 12 to 13 hours per day, even before Ivan had made landfall.

This overlapping of incidents caused command and control confusion within the command heirarchy of FEMA, especially in the early stages. Wildland fire respondents who had worked previous hurricane assignments reported that the interface with FEMA was often rocky because FEMA and the wildland fire agencies do not share a common doctrine. Further, neither a doctrine nor guidelines for managing the relationships between FEMA and the wildland fire agencies has been defined. On "typical" single incidents, this lack of definition often resulted in wildland fire personnel receiving ambiguous or inappropriate assignments, sometimes as teams and sometimes as individuals. The wildland fire respondents indicated that the overlapping hurricanes compounded and exacerbated these difficulties because they received multiple conflicting assignments from multiple entities.

Section 2: **Lessons Learned**

Many of the lessons from these events are not new. There is a documented history of successes and even some candid appraisals of hurricane response and recovery efforts of the past. The Lewis Report resulting from Hurricane Andrew contained more than 500 action items for future operations. In producing this report, the authors will not attempt to reiterate these lessons in yet another report, but will rather use this opportunity to focus on some of the high level pressures and issues that have existed for many years. These were brought into sharp relief during the 2004 Hurricane Response, where undefined or poorly defined leader's intent combined with immature or non-existent processes, producing a high level of unpredictability and uncertainty at the ground level. This situation yielded a wide range of solutions and performance on the ground, and a scenario where responders did not experience consistency in the operational norms.

Most of the "lessons learned" at the ground operational level resulted from innovative thinking and a Herculean effort on the parts of individuals, which resembled the lessons learned by previous teams in the past. In some cases, different teams had faced and solved the same problem, but in opposite ways. While this has been a common theme in previous hurricane response efforts, the intertwining of the four hurricanes magnified the effects in unprecedented ways.

It also posed some unprecedented opportunities. Some IMT personnel gained in the matter of a couple months, the experience that would have normally taken several years of hurricane responses to acquire. Some IMTs saw multiple assignments. And with multiple cycles, many responders got the opportunity not only to learn the lesson, but also to apply new strategies and test them out the next week with another hurricane, using the same players and tools. Generally, this learning cycle was reflected in the more encouraging reports in the later weeks of the response, after processes and procedures had been built and refined.

Although the likelihood of a multiple hurricane incident in the near future may be remote, the cascading, intertwined, multi-state response event that involves the same set of resources and command teams is not a unique problem in the possible scenarios posed by an "all-risk" response.

Summary of Lessons Learned – Collection of Local Corporate Knowledge

- *The USFS Southern Regional Office, U.S. Fish & Wildlife Service, and southeastern Incident Management Teams along with the southern state emergency management organizations have collected documentation describing years of experience with hurricane response efforts. Although this information is critical for training and use in the wildland fire lessons learned effort, it will be most useful in supporting future policy, doctrine, and process discussions regarding IMT use in future FEMA disaster efforts.*

Regional Operations and Coordination

Regional Operations Response

Originally, the hurricane response effort in early August looked similar to others that had been seen before by the USFS Regional Operations staff in Atlanta. As the situation began to “show its teeth” and matured beyond one hurricane, USFS Regional Operations personnel struggled with moving from a reactive to a proactive posture, as well as from a tactical to a strategic framework. Regional operations shifted from being an incident reaction support problem (handled with local experienced teams) to an incident that required multiple out-of-region teams and had impacts not only on emergency operations, but also had direct impacts on agency operations.

As the demand on regional operations resources continued to escalate, rather than decline as usual for a single event, the USFS Regional Office initially had difficulty meeting all the management and leadership demands. This was especially true during the early days of the hurricane series when the FEMA command structures were in flux. USFS Regional Operations personnel reported that in the initial stages, FEMA developed mission assignments for IMTs, Buying Teams, an Area Command Team, and general personnel for other duties. The workload associated with filling these requests, as well as the coordination and setup required to receive and direct these resources, was considerable. Initially, respondents reported that Regional Operations leaders “went tactical” and focused on filling these needs and, thus, was unable to focus properly on the strategic aspects of the mission assignments and direction under the FEMA mission.

Complicating this workload was the fact that FEMA was operating on many levels from the beginning and requests were coming in from many directions. After Hurricane Charley, the FEMA Field Command Officer at the DFO in central Florida was dismissed mid-operation and replaced by FEMA in Washington D.C., temporarily disrupting the command structures. Resource turf issues between the FEMA Regional Operations Center (*ROC*) and the Florida Field Command Officer complicated decisions of where resources should have been sent and what resources would be available to whom.

During this time period, the USFS Southern Region also had to coordinate and plan agency mitigations and responses for hurricane impacts to federal landholdings and agency operations. The symptoms of USFS Regional Operations’ overload were widespread, and in some cases, produced long-lasting problems. Many IMTs reported vague or ineffective assignments and directions for preparation while in staging. Frustrations with the ineffectiveness of the first Area Command team were widely reported as it struggled with trying to figure out what it was supposed to be doing and for whom.

Outside the purview of IMT operations, the USFS Regional Office ordered approximately 150 USFS personnel to work as Community Relations representatives for FEMA. Here, respondents assigned to community relations duties reported being sent out by FEMA with minimal preparation and not operating under the control of any specific organization. They were subsequently “lost” to FEMA and the USFS, in some cases for weeks. Generally, interviewees involved in the community relations operations under the direct control of FEMA frequently reported a substantial lack of organization, training, and command and control, and expressed the need to have an agency command and control structure of some sort that would enable them to stay cohesive and properly focused. Wildland fire agency personnel assigned to these operations were often unaware of or unfamiliar with existing agency guidelines for working under other agencies, which in turn, complicated later operations to recover those personnel.

While seemingly unconnected, experienced respondents attributed these micro-dramas to the overload on USFS Regional Operations personnel during the first two to three weeks of the response operation.

Later, replacement operations assistants, Forest FMOs, Area Command staff, and retired fire management personnel were brought in to assist. With more personnel having IMT experience, USFS Regional Operations was able to become more proactive, strategically focused, and able to initiate corrections for some of the problems.

Summary of Lessons Learned – Regional Operations

- *The workload resulting from a large emergency can be formidable for regional resources. USFS Regional Office Operations should consider developing contingency planning to account for the huge demands a large disaster could present. Replacement and auxiliary personnel should be lined up to assume the responsibilities of ongoing agency business and response not under FEMA. Preplanned trigger points for the activation of operational leaders could assist management in identifying when the situation is becoming unmanageable.*
- *Arriving resources were most often unprepared for the assignment in terms of understanding the Federal Response Plan, ESF#4, and agency SOPs. This training gap was partially filled through efforts by the USFS Regional Office, but the workload involved with supporting this type of just-in-time training was substantial.*
- *The strategic thinking and planning by USFS Regional Operations was compromised by the large scope and complexity of FEMA's requests during the first weeks of the response. These gaps produced a series of problems for IMTs and responders who were without guidance and structure during the first weeks of the incident.*
- *Wildland fire personnel who were individually assigned to work under FEMA were frequently unfamiliar or unaware of existing home agency doctrine and policies with regard to operations under other agencies. These gaps complicated command and control of these personnel, and the effort to find and recover them once dispersed into the incident.*

Briefings

Initially, Regional Operations accepted the incoming three IMTs on September 3. Teams were provided a verbal briefing and sent out to acquire 72 hours of provisions in anticipation of future assignment. Generally, IMT respondents reported general dissatisfaction with the initial briefings as being vague or non-specific. Respondents told of an instance in which an IMT used the initial briefing to develop its Incident Action Plan. After two days of planning, using a traditional Incident Command System (ICS) span of control guidelines and functional areas, the IMT received its actual mission assignment and needed more time to rebuild its plan to reflect the IMT's true role on the incident as the coordinator and support function.

Later, after receiving feedback from demobilizing teams, and in gaining additional resources, USFS Regional Operations pieced together a briefing package of selected material collected from existing agency policies to use with new resources for the Ivan response. The package contained information about the FEMA organization, the National Response Plan, and financial guidance. The financial guidance comprised nearly half of the briefing package and provided policy and procedural guidance for charge codes and purchasing under FEMA. Although the result of whether the package worked better or not was unresolved at the time the ICT was accepting information, the initial reports from the new teams indicated that it was a helpful practice in clarifying intent and general policy murkiness in the gray areas between FEMA and wildland fire.

As preparations began for Ivan's arrival, the USFS Regional Office began spending more time in briefings, providing ample time for IMTs to clarify the mission assignments, organizational structures, differences in the operational environment (from firefighting), and leader's intent.

Several respondents who had embarked on assignments before more detailed briefings were available commented that a description of the FEMA response organization, the financial business processes, and FEMA terminology and acronyms would have been helpful. Those respondents who received a regional package during their initial briefing describing some of these items indicated that it was very useful in getting them "up to speed."

Typically, FEMA personnel did not attend IMT initial briefings, even though respondents stated that they had been invited. Some IMT respondents indicated that they were surprised by the lack of presence of FEMA and many did not interface with a FEMA representative until they were on site at the mission assignment. In some cases, the FEMA representative did not appear on site for a few days after the IMT arrival, leaving the teams to derive the FEMA leader's intent.

Summary of Lessons Learned – Briefings

- *Developing a standardized briefing guide for incoming IMTs helped to provide a better background and foundation for FEMA-related work. These guides assisted with understanding non-standard issues such as finance, incident management, and terminology.*
- *Longer and more detailed IMT briefings generated opportunities to gather needed context, clarify leader's intent and mission assignments, and educate incoming teams.*
- *The lack of FEMA presence in the briefings and on site left wildland fire IMTs to determine many operational parameters without direction or guidance. While USFS Regional Operations, and sometimes Area Command, assisted with these tasks, much of the initial response effort was a best guess.*

Command and Control

In the period following Hurricane Charley, USFS Regional Operations was acting as a primary interface between FEMA and the assigned Incident Management Teams. FEMA, in response to the needs and the future forecast of more storms to come, conducted a relocation and reshuffle of its command centers. In the span of a few short days, FEMA established one Regional Operations Center, closed it down, established another one and established a Disaster Field Office (*DFO*), only to replace the FEMA Field Command Officer there a few days later.

During this period, FEMA ROC requested four Incident Management Teams and a second Area Command Team (*ACT*) to assist with the emerging span-of-control problem. The resource orders traveled via mission assignments from the ROC and DFO ESF#4 desks to USFS Regional Operations, where they were translated into resource orders and placed through the Southern Area Coordination Center for filling.

Respondents explained that with the ROC controlling the IMTs in Atlanta through USFS Regional Operations, and the Florida IMTs and Area Command Team under the control of the DFO in Orlando, FEMA operations from the national, regional, and state levels were all developing mission assignments and work for the IMTs, and in some cases competing to control them. In the case of Area Command, which was located in Florida, the FEMA DFO “took control” of Area Command and thus limited its activities to Florida operations, which forced the ordering of a second Area Command Team to support the IMTs who were located outside of Florida.

Respondents described the tangled command and control structure that emerged when two (and sometimes three or four) command structures attempted to control the same resources and the quagmire of problems and decisional work it produced for agency management. Without structured processes for integrating IMTs and Area Command with the FEMA command structure, operations and command staff fell back into basing their command and control authorities on personal relationships, negotiated items, and ad hoc processes.

Summary of Lessons Learned – Command and Control

- *As command and control authorities and structures became confusing, personnel reverted to relying upon personal relationships and ad hoc processes to sustain operations and solve problems.*

Systems Compatibility

Problems with compatibility were not limited to command and control. Some of them stemmed from USFS agency requirements placed on other National Wildland Coordinating Group (*NWCG*) cooperators or new policies being implemented during the disaster. Across the response, problems with system compatibility caused duplication of effort, errors, and extra work. In most cases, wildland fire resources, FEMA, and the cooperating agencies had to reinvent, test, and revise processes and systems so that they could work together. Frequently, these changes took many days away from the response effort and caused ongoing frustration with response personnel.

The lack of FEMA process consistency was cited as a major factor in perpetuating the confusion, but problems were not limited to non-fire agencies. On many occasions financial and operational respondents reported differences in policies and practices between what was being done on the hurricane effort and what was reported as being in accordance with IMT or National Wildfire Coordinating Group (NWCG) business practices. These differences included use of charge codes, work hours, pay policies, and driver qualifications. Interviewees commented on how difficult it was to resolve discrepancies and policy issues due to the ambiguities in authority and interpretation, especially when combined with some cases of turf protection, cover yourself thinking, and general inflexibility of some of the authorities and decision-makers involved.

Summary of Lessons Learned – Systems Compatibility

- *Incompatibility and unfamiliarity with FEMA systems caused considerable confusion and wasted time. The situation of working under FEMA also caused confusion and problems within the existing financial systems, and discrepancies and guidance was sometimes difficult to find.*

Incident Business Advisors

Usually, the Incident Business Advisor (IBA) is attached to the Forest Agency Administrator, but because there was no “host forest,” the USFS Southern Region Incident Business Management Specialist became the lead IBA for the effort. The lead IBA coordinated directly with six Buying Teams and six IBAs. Finding experienced IBAs proved very difficult, and as a result many IBAs assigned to the hurricane response were trainees.

Originally, IBAs were established for every IMT because so much was unknown and it was feared that IMTs might be isolated from needed IBA support. After the situation progressed, it became clear that this approach was “overkill,” and individual IBAs were not assigned to IMTs during the second round of hurricanes. Respondents reported that IBAs assigned to individual IMTs sometimes did not have enough to do. Some reported that IBAs were a disruption to the finance section as they “wandered outside of their lane.” IBA respondents recommended that in future responses of this magnitude, the first IBA be attached to Area Command (when available) rather than the Regional Coordination Center, with the zone IBAs reporting up to that position to support IMT requirements.

Summary of Lessons Learned – Incident Business Advisors

- *Pairing an IBA to each IMT met with mixed results. Discussion regarding the right IBA assignment loading should be discussed for future incidents.*
- *IBAs may be effective if hinged from the Area Command structure, and this may be considered for the future.*

Charge Codes and Financial Tracking

In my opinion, we have trained our teams to respond to a set known incident—a fire—and we have a hard time thinking outside that box.
- Incident Business Advisor

It seems to us that ROSS is being used beyond what it was designed for.
- Operations Section Chief

The Regional IBA worked with the FEMA comptroller to get general direction for purchasing, determining generally what was appropriate to buy with FEMA funds. FEMA wanted to reduce unnecessary expenditures while under surge because these funds were being drawn directly from FEMA's budgets (not from emergency funding). A FEMA financial representative was also provided to each IMT to provide more detailed support.

In all emergency response operations, decisions about what should and should not be purchased are determined by a number of variables: the nature of the incident, the types of missions being supported, the warrants of the home agencies, and the individuals involved with the decision-making. All incidents are unique and require deviations and adjustments, yet they are similar in that, inevitably, adjustments are essential.

The lack of predictability produced problems for all players. FEMA representatives supporting the IMTs varied considerably in the methods and parameters they placed on the IMT's purchasing. Some wanted total control of purchasing, insisting on approving all purchases; others allowed the IMT to purchase items within their authority and under USFS guidelines, wanting to provide input only on purchases that deviated from these standards. Lacking guidelines, training, or doctrine (which did not exist) about purchasing under FEMA, IMTs were predictably inconsistent in the way that deviations were interpreted.

Financial personnel reported that IMTs had serious difficulties adapting to the differences under FEMA, which they attributed partly to a general lack of understanding of the FEMA environment and partly to general resistance to deviating from standard processes typically used for suppressing wildland fires. In some cases, the lack of guidance and boundaries invited opportunities for IMTs to resist "out of the box" changes that they deemed undesirable and push for further deviations that were personally advantageous.

Respondents reported that they often did not know the best method for ordering and paying for specific services or equipment within the FEMA system. Decisions around some of these topics were often labor intensive. One IBA noted, "There was so much confusion about FEMA purchasing, and, no matter what I did, I just couldn't get the correct information to stick. I passed on information [regarding proper procedure for purchasing] on a daily basis on conference calls, then a new player would enter the picture with what they thought was good information and bad information would start all over again."

Initial surge mission assignments had very limited dollars, so spending was controlled. The pre-supply and support of the IMTs posed difficulties. Weight restrictions placed on IMT members' luggage (teams were transported via chartered jet) limited what the teams had available when they arrived. IMTs were uncertain if and how they could procure replacement equipment or have equipment left at home shipped to them at the incident. As the procedures began to depart from standard firefighting operating practices, some IMTs began to become concerned that unapproved expenditures would not be reimbursed. (Sometimes it took days to get charge codes or expenditures approved.) This produced some reluctance to purchase needed supplies in advance; for fear that the USFS would get stuck with the bill. Concerns were raised about who would pay for what concerning supplies and team equipment for staging. The Regional IBA explained, "We finally compromised and gave each team one S-number. What we had asked the teams [to do] was to go ahead and procure their 72-hour supplies and the S-numbers would come when the declaration happened. Some of the teams were willing to do this, some were not."

Universally, financial and IMT personnel alike reported that IMTs desired to have lists or guidelines defining the financial boundaries written in advance and available upon arrival. IMTs were frustrated at the lack of guidance and charge codes provided to them. Buying Team Interviewees reported that in the field, IMTs expressed the desire to have a list of what to buy for the 72-hour supply and in what quantities (for example: 20 people = 75 lbs. of meat, 50 people = 175 lbs. of meat, etc.).

One of the predictable differences in the FEMA environment is the financial limbo that sometimes occurs during the transition from surge to post-declaration funding. Under normal firefighting operations, it is standard for S-numbers to be issued prior to procurement. After an Emergency Declaration, respondents report that there can be a lag between the declaration and the time when mission assignments are available for new charge codes to be assigned, which effectively suspends activity for a couple of days. In one such case following the declaration for Hurricane Jeanne, the IBAs decided to issue new charge codes with the expectation that the mission assignments would eventually follow. Noted one respondent, "It wasn't textbook, but it worked." In the end, USFS Regional Operations and the IBA determined that it would be easier to purchase surge supplies and stage trailers for teams to alleviate the 72-hour supply ordering confusion.

In general, the "gray" area—where policies may or may not apply—is large and often difficult to define because of the uniqueness of each response effort. For example, Buying Teams assigned to the IMTs expressed concern that Emergency Equipment Rental Agreement (*EERA*) standard rates might not apply due to extreme or all-risk response conditions. Although true for this incident, it may not be true for others. Most financial respondents felt that some level of policy or process review should occur to help minimize ambiguous areas in the application of financial policy.

Charge code changes from surge to post-declaration codes caused ongoing difficulties in the wildland fire cost-tracking systems. Interviewees reported needing to reassign new numbers to existing resources in the Resource Order and Status System (*ROSS*) and I-Suite. Notifying all affected people that the codes had changed proved to be problematic, causing a lot of revisions after the fact. Respondents expressed the need to have more flexibility in I-Suite and to have *ROSS* enabled to reassign a roster of teams for charge code changes.

Summary of Lessons Learned – Charge Codes and Financial Tracking

- *IMT personnel arriving on FEMA incidents should expect financial systems and guidelines to be in flux. Respondents suggested that increased familiarization with FEMA operations would assist IMTs in adapting to working in the financial “gray.”*
- *Discrepancies, ignorance, varying interpretations, and gaps in financial and operational policies caused significant problems or wasted time for IMTs, financial section personnel and operators. Many financial team members could not assist with planning and strategy as they could in a fire situation because there are so many gray or unwritten areas. Financial investigations and decisions around these items can be difficult and slow.*
- *Financial teams must be able to make sweeping or global changes to resource charge codes without notice to remain financially proactive in the emergency environment. System incompatibility and incapability caused considerable time and effort to be spent to support operational transitions.*
- *IMTs arriving by chartered jet had to leave behind equipment and supplies, which had to be procured on site. Uncertainty regarding what could and could not be procured legally was an issue.*
- *Regional Ops, SACC, and the IBA determined it would be easier to purchase surge supplies and stage trailers for teams to alleviate the 72-hour supply ordering confusion.*

Buying Teams

Buying Teams assigned to the IMTs also dealt with a lot of uncertainty. Many personnel stated that they had been unaware of who was in charge of what or who was ordering what. Respondents from the Buying Teams reported that there was no clear coordination among expanded dispatch, SACC, and Buying Teams. The Buying Teams were unaware of items that had been previously ordered and what they were expected to order. Buying Teams reported that coordination and decision making improved once daily conference calls were established among the Buying Teams.

SACC personnel reported that because Buying Teams were operating before expanded dispatch was in place, the Buying Teams did not have needed assistance to answer questions regarding S # Supplies and E # Equipment. SACC does not usually handle expanded dispatch, where S-numbers usually originate, so SACC was unaccustomed to assigning S-numbers and supporting the Buying Teams.

Although the processes were often problematic, the Buying Teams were considered to be a huge asset both by the IMTs and FEMA. FEMA representatives commented on several occasions that the wildland fire Buying Teams were able to procure goods and services extremely quickly and effectively.

Summary of Lessons Learned – Buying Teams

- *Buying Teams reported that daily conference calls assisted greatly in keeping the Buying Teams together, coordinated, and up to date on the latest changes.*
- *FEMA considered Buying Teams to be critical and effective resource.*

Emergency Support Function (ESF) #4

As the primary hinge pin of the USFS to the Federal Response Plan, the ESF#4 desk is the face of wildland fire to FEMA and to other responding agencies. The ESF#4 is staffed at all levels of FEMA operations, including the Emergency Support Team (EST), Regional Operations Center (ROC) and Disaster Field Office (DFO).

Mission Assignment Construction

FEMA thinks IMTs are for every task, which can be overkill if a small task force of logistics people is all that's required. This ordering oversight starts snowballing, causing underutilization, morale and other systemic problems.
- ESF#4

Potential missions can come from a wide variety of sources. They can be generated internally, by FEMA operations, or by other emergency support functions.

The Making of a Mission Assignment with ESF#4

The process for making a FEMA mission assignment is as follows:

- 1. FEMA brings forward an Action Request Form (ARF) to the ESF#4, which essentially says "Can you guys do this?"*
- 2. The ESF#4 uses listening skills and questioning to determine what FEMA is trying to accomplish and determines if it appears to be within the scope and mission of the USFS. This activity is part consultation, education, and to some degree, saluting the flag with a "can do" attitude.*
- 3. The ESF#4 takes that request to those management and field personnel involved to render a decision and to place parameters on the operation, if needed.*
- 4. Based on this, the ESF#4 pulls together a quick cost estimate and gives it back to FEMA. FEMA then develops a Mission Assignment Form (MAF). This form must have the FEMA comptroller's signature on it, which is the authorization to release funding.*
- 5. FEMA develops the actual task order.*

ESF#4 respondents felt strongly that the mission assignment protocols need to be spelled out prior to all risk assignments. Some elaborated that they felt this process should be doctrine and not developed by personalities for every incident, creating different standards for every FEMA event. It is critical that the wording of mission assignments clearly explain what the intended task is. It should do so in language that is neither too vague nor too specific. According to ESF#4 respondents, once built and processed, changing or amending a mission assignment borders on bureaucratic impossibility because of the way FEMA operates. During the surge phase in the early weeks of the hurricane response, FEMA drafted and the USFS accepted several mission assignments for resources, including community relations personnel, Buying Teams, and Incident Management Teams.

Later, ESF#4 respondents reported that the mission assignments became too specific and devoid of needed intent. Rather than drafting a mission to set up and man a Mobilization Center, one ESF#4 respondent reported receiving orders for each of the parts, to acquire 20 phones, for example.

Eventually, ESF#4s, together with Area Command and USFS Regional Operations, began assisting FEMA more effectively in constructing more meaningful and task-based mission assignments. These improved assignments described what needed to be done, yet allowed for flexibility in how the task was to be accomplished.

As described previously, during the surge phase for Hurricane Frances, orders were placed for three Incident Management Teams to be pre-positioned for response. Not knowing where these resources would be needed or what they were to be needed for created confusion and problems when these resources arrived to be deployed. In contrast to reports from the first IMTs to arrive who were not issued meaningful mission assignments, respondents from subsequent IMTs who were assigned surge and preparation activities were ordered with specific missions in mind.

ESF#4 – The Job, the Person

To many in FEMA, the wildland fire Incident Management Teams represent the largest, most capable, independent, self-supporting response organization in the U.S. As an organization with a well-established and specialized doctrine of incident management and the Incident Command System (ICS), the wildland fire community (through the National Wildfire Coordination Group) appears a specialized, well-honed tool to be used in a non-specialized, ad hoc environment. One ESF#4 respondent reported that initially FEMA regional operations thought that all IMTs could do was fight fires (true to the ESF#4 description), yet in the end IMTs are sent to accomplish a wide variety of mission assignments for FEMA. On the other end of the spectrum, some respondents commented that they felt the IMTs were being volunteered to do work by the USFS National Office and the U.S. Department of Agriculture that was neither appropriate nor well suited to IMT skill sets. Respondents questioned whether IMTs and wildland firefighters are appropriate resources to be tasked with clearing orchards, tarping houses, herding cattle, and fixing fences. All of these tasks were discussed as potential mission assignments, but were stopped primarily because of funding questions. For these reasons, the respondents pointed to the ESF#4 positions as critical for helping to establish priorities.

The USFS ESF#4 is a unique position as it represents this very capable tool to a client that may or may not understand it or know how to use it. The USFS R8 Regional Office maintains a person to serve as liaison to FEMA and is the first to handle initial ESF#4 duties. Over the course of the 2004 Hurricane Response twenty-six personnel served at the ESF#4 desk.

The position is at once political, consultative, educational, decisional, strategic and used as a liaison. The ESF#4 position gathers ongoing intelligence for the agency and the IMTs about what is emerging in the incident. It also helps facilitate the decision makers so that IMTs can be used correctly and effectively in the emergency response environment. As the ESF#4 position rarely deals with firefighting, most of the potential taskings are beyond both FEMA's and the IMT's doctrinal experience or expertise.

IMT Incident Commanders and Operations Section Chiefs unanimously agreed that the ESF#4 positions, which are currently filled as Technical Specialists (THSP), must be staffed with personnel who are very experienced and have an understanding of IMT functions, ICS, dispatch and ordering procedures, policy, and negotiating skills. Because of the weight of issues involved, the respondents agreed that a person with political savvy and good interpersonal skills should hold the position. Several IMT and ESF #4 respondents saw previous IMT experience as a "must".

Ideally, ESF #4s works between USFS Regional Operations and FEMA Operations on mission taskings and, as necessary, consult with the IMT and other players. The original FEMA request for four IMTs and an Area Command Team was received by ESF#4, but was done so without consultation about where and how the teams would be used, and set into motion a chain of uncertainty concerning the roles and responsibilities of Area Command within the incident. Respondents who had worked in the earlier stages commented that introducing Area Command served to further complicate the chain of command because IMTs were receiving information and guidance from ESF#4, USFS Regional Operations and Area Command simultaneously. Respondents working with the second Area Command Team were more generous. They seemed to know that (in the latter case) Area Command was serving as the primary point of contact and that ESF#4 sat somewhere behind the "Area Command wall".

Overall, respondents interviewed during this collection effort expressed difficulty in understanding where the ESF#4 desks, USFS Regional Operations, and Area Command all stopped and started. For example in Florida, respondents reported that three to four ESF#4s had been associated with the DFO at any one time. Some tasks came through Area Command, some through FEMA, and some through other agencies. Some interviewees felt that Area Command was micromanaging resource needs instead of leaving it up to the IMTs. When asked specifically, however, if Area Command and ESF#4 were redundant, most ESF#4, Area Command, and IMT respondents indicated that they were not doing identical jobs, especially where the respondents believed that Area Command was an effective filter of the “FEMA noise”.

Some ESF#4 respondents suggested that an ESF#4 Operations Handbook be constructed and that qualifications and training standards be developed. A position checklist for ESF#4 was also proposed as a tool that would assist the development and certification of ESF#4 staff.

Summary of Lessons Learned – ESF#4

- *ESF#4 respondents felt strongly that the mission assignment protocols need to be spelled out prior to all risk assignments. Some elaborated to say that they felt this process should be doctrine and not developed by personalities for every incident, creating different standards for every FEMA event.*
- *Mission assignments must be carefully worded to prevent pointless or vague assignments, yet provide enough flexibility for IMTs to operate without being handcuffed. Overly detailed mission assignments cause valuable time to be wasted.*
- *Many fire personnel on assignment did not readily understand the role and function of the ESF #4 position.*
- *The ESF#4 position requires someone with high level skills, including both interpersonal and political. It is unclear if the FEMA training package, technical requirement, or the published USFS position parameters (if they exist) are adequate for supporting this position sufficiently.*
- *Operations handbooks and checklists could assist persons serving in the ESF#4 position.*
- *Respondents agreed that the ESF#4 position should be staffed with personnel who are very experienced and have an understanding of IMT functions, ICS, dispatch and ordering procedures, policy, and negotiating skills.*

Incident Management Team Operations

The Core Mission – People Management

Historically, Incident Management Teams (IMTs) have been used during disaster responses to run mobilization centers, base camps, operational and logistical staging areas, and distribution centers. The 2004 Hurricane Response mission assignments included all of these activities. Additionally, IMTs found themselves managing other operations, including a Critical Care Center and assisting an Emergency Operations Center.

Most of these logistical assignments were complex, involving significant tracking, inventory control, and shipping/receiving components. In many cases, the information reporting requirements were staggering. The on-site needs in the stricken areas naturally lead to the expansion of the core mission. Yet as staggering as some of these missions were, many IMT respondents noted that the “mission” was less than half the real job. Managing the conglomeration of people from various response agencies and organizations, all who needed to be in charge and informed, was the far bigger task associated with these assignments. For example, one IMT who was responsible for operating a staging area that contained, tracked and supported more than 400 trucks, trailers and drivers, cited “people management” (FEMA and other response agencies) as by far their biggest job, consuming most of the IMT’s time and effort.

In each case, the Incident Management Teams deployed for missions felt that they were “successful” (as did FEMA), though the road was hard for most during the beginning stages as they had to sort out processes, procedures, politics, and rank. Without operating processes or doctrine in place, respondents commonly reported that success was all about the “personalities” of the players. Some cooperators and FEMA representatives were good leaders and dedicated partners, others were myopic, or had otherwise poor operational or people skills. IMT personnel were consistently pressed into the business of managing people and their information needs more than any operational tasks. The personal effort required for securing mission success required a wide variety of interpersonal skills spanning “coaxing” and “encouraging,” to “subtle threats” and “very assertive language.”

Many respondents also commented how luck and happenstance played a role in the outcomes. Had they encountered more difficult personalities, the situation could have turned out badly. The need for interpersonal relations, communication, and flexibility in the face of enormous problems were the most common facets of the lessons learned in the ground operations theater.

Summary of Lessons Learned – People Management

- *IMT respondents noted that the largest percentage of the workload came from the demands of managing representatives from various response agencies and organizations on site. IMT personnel had to use a wide variety of interpersonal and communication skills to be successful.*
- *The lack of defined processes, procedures and command structures made for difficult days in the beginning of the assignments.*

Staging and Ordering

When IMTs were ordered, many were flown to Atlanta, Georgia via a National Interagency Fire Center (*NIFC*) chartered jet. USFS Regional Operations intended originally to “order short”, and limit the IMTs to 30 members with the idea that once the mission assignments were known, the teams could add or delete members from their staff accordingly. The Southeast Area Coordination Center (*SACC*) relayed that limitation in the resource orders, and baggage was limited to 65 lbs. because of aircraft weight limitations. Once on the ground and in staging, the teams were briefed and sent out to procure a 72-hour supply of equipment and consumables so that the team could be self-sufficient. For the most part, IMTs felt that they were understaffed and under-supplied from the start. They began a series of name requests through SACC to procure the rest of the team, which in turn shifted workload to SACC in filling the orders. While the charter flight was potentially less expensive than commercial airlines, the weight restrictions caused other problems when it was unclear to personnel about whether such shipping or local procurement of needed items would be reimbursed or authorized. In addition to the problems associated with equipping the teams (discussed earlier), the issue brought to light differences in the way IMTs advocated solving the various problems they faced with matching manpower to the mission.

Among the respondents, a difference in philosophy and approach surfaced about the way that Incident Management Teams should be dispatched into these types of responses. The first issue relates to whether IMT staging is best done in advance, or whether it is just as easy to stage personnel at home and have them on call until needed. Many IMT respondents said that the time spent in staging without a mission assignment was wasted and was of little use to FEMA and the general emergency response effort. Similarly, respondents reported that sending IMTs to a field location without a defined mission was not effective and that teams either “found” work ad hoc or were left with nothing to do.

The second philosophical difference concerned whether short or advance teams should be sent into the field prior to team assignment. Some respondents stated that it would have been better to figure out the general assignment and situation on site (status of infrastructure, communications, etc.) before deciding which team members should come, than to have underutilized team members hanging around with nothing to do.

A third related philosophical difference was noted in the preference of using a custom team with fewer members to meet the need or whether it was better to field a fully staffed IMT. Some wildland fire agency respondents attached to the FEMA ROC, SACC, and USFS Regional Operations stated that it was more appropriate to send individual logistical and planning staff to these incidents that could integrate with other IMTs or form new teams. This idea extended to the development of specific logistical support teams with the right people, tools, and software. Most IMT respondents felt that it was better to enter into an unknown mission fully prepared with a full team of people who were “known and trusted”, and that it was easier to adapt a known team member to a new and unknown task than to try to assemble a team of unknowns to accomplish a known task. As a response to the implied waste of having idle personnel, IMT respondents offered that personnel could be sent home if the mission proved unproductive for specific positions.

Summary of Lessons Learned – Staging and Ordering

- *The optimum solution for ordering, staging and fielding IMTs into these environments was not agreed upon. All groups indicated that the current methods and assumptions for assembling teams requires further development, so that the process can be more adaptive, flexible and effective.*

IMT Organization

*We need to get back to the basics about implementing ICS.
- Incident Commander*

Because of the restrictions on team members, each IMT went into action with 30 persons and then additional team members were name request resources. Faced with either a stated mission or an emerging mission, the IMTs universally set about making changes to their structure to fit the perceived mission.

In many cases, respondents reported that FEMA was not there when they first arrived on scene. Afterwards, it took time to determine who was in charge and to sort out the players that continued to trickle in each day. Adaptations were made to account for the interface requirements with other agencies and several teams beefed up their liaison capacities considerably.

Across the responding IMTs, respondents described how they applied ICS and their team structure to the problems at hand. Most IMTs used a textbook or doctrinal approach to ICS and placed the mission (even if it was logistical in nature) under the Operations Section. In some cases, operational firefighters found themselves responsible for databases, inventory tracking, and status reporting. In other cases, personnel from the Plans or Logistics sections were moved into Operations to lend technical support, or the operations work was spread out among all the sections with expertise.

Where Operations took the lead, some support section personnel were unsettled because they assumed that because the mission was a logistical mission, the Logistics Section should be the lead.

Other IMTs distributed the work among the Plans, Logistics and Operations sections. While all reported that ICS worked in all-risk applications, there were noted differences in philosophy about the way it was applied, even among personnel on the same IMT. All respondents considered their version of ICS to be “successful” in accomplishing mission objectives. When asked about the observation, one Incident Commander attributed the apparent differences to a lack of discipline in implementing the basics of ICS doctrine.

Overall, ICS was heralded as a success for implementing ground activities at the IMT level and below. Respondents noted that it produced a “center of mass” or “momentum” around which other agencies could be integrated or contained. The mature approaches to process used by wildland fire personnel reportedly integrated well with military cooperators, who were used to working with mature systems.

Summary of Lessons Learned – IMT Organization

- *The Incident Command System was used by all responding IMTs, and was considered to be an important factor in getting results. Often, IMTs were the only organization on site with any ICS skills.*
- *Personnel were varied in the way that they organized and applied the wildland fire ICS to new non-fire situations. While it did not seem to substantially impact the operational effectiveness of the teams, it may raise questions as to what is being trained to non-fire partners of wildland fire, the depth of understanding of ICS fundamentals, and what the appropriate all-risk philosophy should be when training wildland fire personnel.*
- *ICS and IMT organization produced a center of mass and momentum, which enabled Incident Commanders to set a direction for others to follow and provided a vision of what “right” looked like.*

Unified Command

Unified command is a concept of command where the owners of jurisdictional territory (physical or operational) share decision-making and jointly determine the objectives and tasking of the operation. It can be used when owners of the jurisdictions will not (or cannot for legal or political reasons) release authority or control to another agency. Personnel are generally co-located. While usually not as quick or effective as an agreed upon chain of command, it is often necessary in all-risk multi-agency responses.

Across the hurricane response, IMTs attempted to quickly establish order in the field through trying to build an agreed upon chain of command with those who were present. The methods used to do this ranged from being friendly to subtle forms of blackmail. Usually, through a combination of luck, personalities, and momentum, some teams were able to establish a pecking order of some kind. Like a dog pack, the order had to be reinforced every time a new player arrived and attempted to take control, but overall it was seen as successful and the preferred method, *if* it could be achieved.

The practice of unified command has a record of working in past relief efforts and was seen by the Incident Commanders as the only way to go in these multi-agency and politically charged events. The successes cited by respondents in this relief effort and in previous efforts were small, involving two or three entities. In one IMT's experience in Florida, an established chain of command worked well for the first assignment to establish a pass-through warehouse. The second assignment to establish a Critical Care Center was conducted under unified command.

Summary of Lessons Learned – Unified Command

- *IMTs attempted to establish a pecking order and chain of command early in the process whenever possible.*
- *Unified command was used successfully in the 2004 Hurricane Response and was advocated by Incident Command Teams for future use when a chain of command cannot be established. Generally, IMT respondents accepted and advocated the use of unified command when jurisdictional issues were present.*

Plans and Logistics

Most planning and logistics lessons were specific to the problems posed by the individual mission assignments. Common themes in both these sections focused on dealing with the errors and problems stemming from poorly defined or communicated missions. Section chiefs found it difficult to guide subordinates in controlling scope creep and setting objectives in many cases. In most cases, these sections reported better communication and relationships with other supporting agencies such as the Department of Defense and the Department of Transportation, than with FEMA itself. Personnel from other agencies with previous ICS experience reportedly worked well with these sections.

Coordination with FEMA and other agencies was complicated by a mismatch in planning and staffing cycles. According to IMT respondents, the operational cycles used by the wildland fire IMTs and FEMA's operational cycles did not synchronize well, complicating planning activities and personnel availability for decision making. On several missions, IMTs were able to staff night operational periods, enabling the teams to make great progress once freed from the interruption and chaos associated with the day operational period. Conversely, FEMA generally placed their strongest leaders and personnel on shift during the day. IMT night shift operations reported issues with resolving problems and getting support during the night shift, because FEMA tended to assign their weakest personnel to night shift duty.

Summary of Lessons Learned – Plans and Logistics

- *Logistics and planning sections were impacted adversely by the lack of mission definition and leader's intent.*
- *Differences between the ICS operational periods and planning cycles used by the IMTs and by FEMA complicated coordination and planning activities.*
- *IMTs conducting distribution and shipping missions should plan for reduced FEMA night shift capability, and push critical decision making into day hours if possible.*

Information

Because of the large amount of ongoing change and uncertainty, respondent interviews revealed an overall larger amount of care and time taken with briefing and coordination activities between incoming and outgoing teams, and between IMT members. Daily or more frequent briefings were held between team members, with members of coordinating agencies, Area Command, and the ESF#4 or USFS Regional Operations, as needed. Liaison officers held briefing and coordination meetings several times a day. New arrivals were routinely briefed up front. These meetings, while time consuming, were seen as critical for the success of the team given the demands of the environment. Some teams integrated other cooperators of FEMA personnel into team briefings.

In many cases teams worked to co-locate FEMA, other IMTs, and other agencies in joint environments – sometimes through unified command, or through close physical proximity. Joint Information Centers were considered to be useful to some IMTs to eliminate confusion and rumors, and eased the information management and distribution problems. One team reported that establishing working boundaries with the FEMA field Public Information Officer (*PIO*) was the key to preventing uncontrolled expansion of the mission through unexpected announcements. Having the FEMA PIO participate in the operational briefings and planning meetings was successful and helped to maintain a positive working relationship with FEMA.

Summary of Lessons Learned - Information

- *Communication requirements were extremely heavy in the hurricane response events. Briefings were held many times a day at points, and special meetings were common to support the information needs of agency cooperators. Briefing duration and frequency was higher than in wildland fire operations.*
- *Joint Information Centers were considered to be useful to some IMTs to eliminate confusion and rumors, and eased the information management and distribution problems.*

Fatigue

*We were handcuffed, but told to be ready over and over again.
We feel drained, as though we've been here for two months
instead of two weeks.
- IMT staff member*

It was widely reported by both wildland fire and FEMA personnel that exhaustion and fatigue played a significant role as the string of hurricane responses progressed. Most likely due to its historical inexperience with large long-duration events, FEMA has no standards for managing or countering fatigue. IMT personnel reported frequent cases where FEMA personnel were being pushed beyond their capabilities.

Wildland fire personnel reported wide variations in fatigue factors, depending on what they were assigned to do, but more importantly, if the work was rewarding or meaningful. Personnel who had been assigned seemingly pointless work or no work at all commented frequently that they could not wait to demobilize. These personnel reported that these assignments caused fatigue and morale problems. Many others (usually non-IMT personnel), when stuck in poor assignments, reportedly found ways to leave their assignment so that they could feel useful helping other groups.

For those that found meaningful work, fatigue was generally not reported. Because the process of developing relationships, processes and procedures for managing a mission often took more than a week to pull together, wildland fire personnel reported frustration with the wildland fire work-rest policies. Interviewees reported disappointment at the prospect of leaving their operation once that progress was finally being made and work was becoming more rewarding. Respondents questioned if the safety factors that the wildland fire 14-day work assignment policy was intended to correct was still applicable to these all-risk logistical support assignments. In some cases, fire management permitted teams to stay one or two extra days to finish out assignments rather than transitioning a new team into an assignment that was winding down. No ill-effects were reported as the result of these extensions.. When extended, personnel reported that the extensions made the mission more rewarding. Extensions, however, appeared to the Information Collection Team members to be the exception rather than the rule, and most teams left after 14 days on assignment.

Summary of Lessons Learned - Fatigue

- *Fatigue and morale varied more due to the type of work, rather than the pace of it.*
- *Respondents generally agreed that the use of the 14-day assignment restriction should be reexamined to be more applicable to these assignments.*

FEMA and ICS

FEMA, under the Federal Response Plan, is ICS in a different form.

- FEMA Operations Leader

FEMA needs to adopt ICS to be successful.

- (another) FEMA Operations Leader

Typical of the wide range of skills and abilities seen in FEMA personnel across the hurricane response, FEMA respondent views also varied widely concerning FEMA's adoption of the Incident Command System (*ICS*) or the upcoming implementation of the National Incident Management System (*NIMS*). The opinions of FEMA Operations personnel ranged from denial, to indicating that the change meant a "repainting job", to admitting that the change would mean an all out structural change. Some FEMA operations personnel recognized that other emergency service organizations had successfully adapted ICS to their needs, and were convinced that ICS was the way for the future in FEMA. Several FEMA respondents expressed dedication to demonstrating success in the implementation of ICS during the 2004 Hurricane Response effort.

Generally, wildland fire respondents reported that FEMA personnel did not generally use ICS during the 2004 Hurricane Response, nor were they particularly interested in doing so. But, where Area Command was able to place more of the response operation under ICS in cooperation with FEMA, ICS was implemented in a wider range of activities. Wildland fire respondents unanimously agreed that FEMA would benefit from the adoption of ICS and its core principles, but more importantly, that their own mission would be greatly simplified.

Summary of Lessons Learned – FEMA and ICS

- *FEMA was not observed using ICS outside of participating in the IMT operations.*
- *FEMA attitudes about the pending transition to ICS varied, indicating spotty acceptance of the concept by FEMA personnel.*
- *Wildland fire respondents agreed unanimously that FEMA would benefit (as would they) from adopting ICS.*

Area Command

The use of an Area Command Teams (*ACT*) during a hurricane response was tried for the first time during the 2004 Hurricane Response. USFS Regional Operations originally counseled FEMA Regional Operations to use an Area Command Team when it became apparent that there would be many IMTs operating on the response effort, and that an ACT would be helpful for the same reasons it would be in a complex fire scenario: to assist with span of control, to set priorities, and to allocate resources.

The first ACT was initially co-located at the FEMA Regional Operations Center in Atlanta. After Hurricane Charley, it was moved to Orlando, Florida. As mentioned earlier, a second Area Command Team was later ordered to support the non-Florida IMTs prior to Ivan's arrival, after the first ACT was limited to Florida operations by the FEMA DFO in Orlando. Follow-on ACTs eventually replaced both these teams after this collection effort stopped, so the impressions contained herein relate to the first ACTs that worked on the response.

According to interviewees, at first the Area Command Team had difficulties trying to find its place in the command and control hierarchy. IMTs operating under the first ACT reported having difficulty with Area Command in the mix, and did not perceive much benefit from the presence of the ACT. Some saw the presence of Area Command as an extra layer of bureaucracy. They reported that USFS Regional Operations personnel would sometimes "go around" the ACT, clouding the roles and responsibilities of the ACT in the eyes of the IMTs. Another IC reported only conversing once or twice with ACT during their assignment, but felt better that they were there.

Eventually, the first Area Command Team settled into four primary operational duties during the response effort, which were adopted as objectives for the second ACT:

- Take care of the IMT logistical needs
- Serve as a buffer from outside influences (FEMA and ESF#4 traffic)
- Act as a central point of contact, replacing the link to the ESF#4 from each IMT
- Coordinate state-wide aircraft operations

Beyond these operational objectives, the first Area Command Team stated that the new role of Area Command had expanded to taking workload off the line officers dealing with large incidents. In the case of the second ACT, USFS Regional Operations personnel reported that the ACT had indeed relieved them of some of the workload at their levels, affirming this trend.

When the second Area Command Team arrived, much more was known about what the role of Area Command should be, based upon the experience with the first ACT. In the second round, the briefing for the Area Command Team was observed by the Information Collection Team and lasted more than three hours. During this briefing, roles and responsibilities were clearly defined. With the overall mission of acting as a single point of contact for the IMTs, and working as a regular ACT, the ACT would act as a shield and filter to keep the IMTs from needing to deal with the communication requirements of FEMA and ESF#4.

Apart and above the operational objectives, USFS Regional Operations and Area Command personnel cited FEMA education, mentoring, and the importance of demonstrating ICS success with FEMA as a “major objective” of the ACT during in the response. It was stated that much better efficiency would be obtained through the use of ICS and that FEMA had to be encouraged to adopt ICS to smooth the path. Respondents also said that the exercise in Area Command would assist FEMA in learning to think more strategically in its response actions, which were generally categorized as reactive and short-sighted by ESF#4s and fire management personnel.

Although the IMTs remained technically split on the viability of the Area Command concept, the teams under the second ACT interviewed by the Information Collection Team reported that the concept was generally working well and as designed. Both USFS Regional Operations and IMTs reported benefits in reducing workload for both parties. At the time the Information Collection Team left the area, the final outcome and the details of how Area Command was integrated with ESF#4 and USFS Regional Operations had not yet emerged.

Summary of Lessons Learned – Area Command

- *IMT respondents were split on the concept of using Area Command in these operations. IMTs that arrived later in the response appeared to have a higher acceptance of the concept than IMTs who arrived early in the process.*
- *USFS Regional Operations perceived the presence of Area Command as a benefit to them, especially in the second round of ACT use. ACT successfully relieved much of the workload and enabled the Operations staff to focus more on the regional issues and problems not directly related to individual IMT taskings.*

Global Impressions

The Role of Politics and Competition

FEMA's got an impossible job. They need to meet political and public expectations in an instant gratification world. They come in when the state is overwhelmed with a chaotic emergency and try to work with 40 different agencies to get help to people who are desperate to get it. One person doesn't get a hot meal and a shower and FEMA has failed.
- ESF#4

FEMA is more concerned about "appearing" to be helping, but not really actually helping. They send resources whether they are needed or not and if an IMT refuses it then the IMT is blamed for the tasking failure.
- Wildland Fire Operations leader

At all levels, wildland fire resources reported a highly politicized environment where agency liaisons and representatives all expected to be in charge and drive events to their needs. All IMTs reported that each agency that had a role in the response (big or small), had reporting requirements to their agency chain of command, and were measured on how well they accomplished their piece of the larger picture. The hurricane response was commonly seen as an opportunity for these agencies and organizations to showcase their importance, with FEMA being front and center in this effort.

The picture painted by IMT personnel working in distribution and staging operations, was an environment where most players needed to be able to report progress against their objectives. This produced a huge need for current information about where supplies were located and what had been delivered. At one point following Hurricane Ivan, FEMA logistics staff wanted updated inventory reports every two hours. At local and operational staging areas it was not uncommon to have three or four agencies trying to count the same trucks and containers for their own reporting needs. Interviewees at FEMA Operations stated unequivocally that the core benefit of wildland fire IMTs was that they provided "eyes on ground" intelligence and reported the quantities of relief resources, goods, and materials delivered to the needy site. These inventory measurements determined success or failure for FEMA.

IMT personnel reported that this measurement was extremely important. They described the difficulty of managing a "zero sum game" between agencies, where one agency's failure is another's success, and where the fault for an error was quickly deflected to others or was quickly hidden. The political pressures, particularly with FEMA, were reported as extreme and far beyond the pressures typically experienced in wildland fire operations. Many IMTs shared stories of FEMA needing to suddenly relocate resources, consolidate personnel, or change leaders to demonstrate progress to political forces at the departmental or legislative level. To many wildland agency personnel, these reactions and gyrations appeared operationally nonsensical in relation to the ground mission's requirements.

In this competitive environment where the relief effort had no measurable collective or “team” result, IMTs were tasked with designing, negotiating, building, and maintaining information management systems that fed the huge need for information. Teams were tasked with building new agreed upon chains of command (or when jurisdictionally impossible, unified command), and liaison relationships in an environment where many players had significant political objectives or agendas outside the overarching “team” result of supplying aid and comfort. Many wildland fire respondents found this apparent lack of common values frustrating and a new experience.

Summary of Lessons Learned – Role of Politics and Competition

- *The response process and system, as described in the Federal Response Plan, creates conflicting priorities for the agencies on the ground. These conflicts interfere with the creation of a collective team result for the effort and set the precursor for natural dysfunction.*

Managing the Unexpected

When all you have is a hammer, everything starts looking like a nail.

- Ops Section Chief paraphrasing an old saying

The Wildland fire community has developed a robust and tested ICS-based doctrine for managing wildland fires over many years. This discipline and culture is trained from the very beginning of a wildland firefighter’s career. Moreover, it is reinforced many times a year during real life operations. The expectations and assumptions of the operational norm are deeply entrenched in the workforce. While this set of doctrine, experience, and philosophies enables wildland fire personnel to become immediately effective once on the ground in a fire environment, it is a double-edged sword in the all-risk response environment.

For years, Incident Management Teams and agency fire operations personnel in the southeastern U.S. have been assisting with hurricane responses. Consistently, these respondents stressed how hard it is to bring firefighting personnel around to understand and adapt to the magnitude of the change in thinking that the all-risk environment presents.

While ICS is generally perceived to be usable everywhere, some respondents stated that the difficulty stemmed from wildland fire’s version of ICS (particularly the organizations, support processes, tools, and policies that support firefighting). These do not translate well to the demands of the FEMA-run disaster management environment. The very behaviors, assumptions, processes, protocols, and decision-making processes that make for an extremely effective firefighting organization, often undermine the ability to recognize changes in the environment, adopt new strategies, and think outside the “box” in places where the wildland fire structure and processes do not exist. The transition to the new environment took many wildland fire personnel by surprise, and was an ongoing source of frustration and disappointment as personnel kept trying to implement their old tools and habits in a new world.

Setting Expectations

We work for FEMA as part of the larger national emergency response effort. This is not a fire, and you are not in charge.

Your assignment may be frustrating, angering, boring, and poorly organized. You may have sub-standard accommodations and food. Your sleeping areas may be wet, buggy, and reptile-infested. Expect long periods of standing by in staging areas waiting for missions and direction. You may not be assigned to do anything for the entire length of your assignment! The morale of fellow workers, and possibly yourself, might be at an all-time low and may last for several weeks after your assignment.

- Assignment initial briefing information

Some differences become obvious soon after starting a FEMA disaster response mission. For many respondents (individuals and teams, alike), it could not have been soon enough. Normally in total command, the FEMA response places IMTs into a situation and status akin to the 17th shovel on a hand crew, working under a marginal crew boss. They frequently do not know what the big plan is, who is in charge, what the specific plan is, when they will stop, or when they will go home. They possess a “can do” attitude and some are willing to do practically anything. The shift associated from the normal situation of being in command, the first to know, tactically focused, and busy was turned upside down. Here, many IMTs found themselves serving a supporting role, with little information, performing a tactically ambiguous and unfamiliar mission with little actual work. The mindset change required to adapt to this shift was considerable.

Respondents indicated that disaster response assignments are fraught with uncertainty and cause previously unknown types and levels of stress on both people and systems. Learning to live with the uncertainty is difficult. People commonly seek to find ways to turn unknowns into knowns, whether through a hunger for information (such as with the response agencies), hanging on to old ways of doing things, or otherwise resisting change.

SACC respondents and USFS Regional Operations personnel reported large numbers of name request resource orders in the early weeks of the incident, as personnel attempted to exercise control over their environment by bringing in people who were known quantities, rather than dealing with another unknown. When faced with a lack of predictable events, personnel generally tended to side with prior personal relationships over equally or more qualified local resources. No level of the organization was immune. SACC received name requests ranging from Incident Commanders to forklift operators. The phenomenon was not limited to wildland fire resources and occurred system-wide with other agencies, including FEMA.

USFS Regional Operations attempted to mitigate some of the unfamiliarity and discomfort through the use of more briefing information. The effort deepened with incoming IMTs as the response continued. Information that was included and repeated by IMT team members' messages reinforced the value of discipline, perspective, and identity in making the transition:

- *Be disciplined but flexible in your work and your thinking.*
- *Keep perspective, and remember that you will rarely ever have good situation awareness on the larger operation.*
- *Remember who you are (identity) and for whom you work.*

Following is some of the detailed guidance of these messages:

Discipline

Everyday we get a new Elvis sighting – the hard part is learning to measure your reaction so that you are still listening, but only reacting at the right amount. It takes experience to know when to jump. I don't know how you could train that.

It was common to hear that Elvis was in the hotel, but then if you later heard that he was seen in the restaurant and then later by the pool, you started to put some stock into the rumor and might start to investigate it.

- IMT Staff members discussing the rumors and gyrations caused by potential mission assignments floating through the system

In response activities, some firefighters related stories of being faced with people in distress, requesting assistance that could have been met on the spot. Some respondents expressed guilt at being thanked by hurricane victims, when they privately knew that they were really doing nothing to help them. Incident Commanders acknowledged that the potential for distraction was great and the temptation to start working on something (anything) was strong. The natural response was to react and engage. However, once finally settled on a mission, IMTs found increasing opportunities to expand their service beyond the original mission, but doing so in a thoughtful and planned manner.

Command staff with previous hurricane response experience emphasized that to remain effective within the larger response effort, firefighters must keep focused on the assigned mission and follow the agreed upon process (whatever it may be), so that resources can be committed in a deliberate and measured way. Even for IMTs, it was challenging to keep mission focus in these environments. Sometimes, there was little direct guidance provided outside the mission assignments and subsequent discussions about what the mission assignment really meant. Respondents reported that wildland fire personnel could let the default “can do” attitude make a decision about engaging in operations when they really needed to be exercising the mental discipline to ask themselves, “Should we do it?”, “Is this our job in the big picture of things?”, or “Where are the lines that define the job?”

Another item related to discipline concerned a natural human reaction. When faced with an unknown future and the associated stress it produces, people naturally react by becoming hyper-vigilant to the environment and attempt to plan for contingencies and alternate courses of action. The emergency response environment is fraught with uncertainty and unknowns and personnel reported struggling with trying to predict an environment that is often unpredictable.

IMT personnel reported that as a need for assistance on the ground was communicated up the chain of command, decisions were made, and mission assignments came back down the chain again. The problem would pass through many hands. Requests and discussions are heard, overheard, passed along, and were done in a typically close and communication-intensive work environment. Through the telling and retelling in the rumor mill, comments turned into requests, and requests implied new mission assignments. These potential future mission assignments began to creep into operational planning and started to affect ongoing operations as personnel began to anticipate changes.

Termed “Elvis sightings”, leaders reported that it demanded a constant effort to help people from overreacting or making decisions based on speculative information. Having the discipline to listen to the rumor mill for intelligence and then making decisions about its viability was hard, especially for the lesser experienced or when people were being underutilized.

Perspective

We felt like a resource drain using up food, water, and rooms that the people in the area needed. We listened to their stories of survival and felt like we were able to accomplish very little, used their scarce resources and then abandoned them. We are ruining the morale of our people [with this work].
-Incident Commander

Responders and managers with years of FEMA experience described how difficult it was to perceive the size and complexity of the whole disaster response effort. Further, seeing the whole picture was probably impossible, even for FEMA. Working as a function under FEMA means that FEMA is in charge and will remain so regardless of how dysfunctional it is perceived to be at times. While IMTs admitted that they might not have command, they realized that they had influence in the process through leading from the side and from below.

Across the board, the stories and interviews with FEMA and wildland fire personnel reaffirm that the FEMA emergency response effort was based on a different set of values, rules, and measurements than those taught or used in wildland fire. The measurements of failure or success were different; sometimes the very presence of resources was enough, regardless of what happened on the ground. As an agency with its operational history in “recovery management” vs. “incident response”, FEMA is connected much higher up the political food chain than the fire management offices of the land management agencies. As a result, the focus of some response efforts appeared strange and the methods ludicrous to some respondents.

Understanding and keeping in mind that there is a “big picture”, even if all of it is not visible, was cited by respondents as core to keeping emotions under control and making some sense out of situations that at times make no sense at all. Wildland fire IMTs sometimes represent the “17th shovel” and leaders reported that briefing and counseling subordinates to that reality was an important and recurrent activity.

While the intrinsic rewards that sustain Incident Management Team members during these assignments are different from wildland fire duty, there are rewards in meaningful mission assignments. The immediate feedback and rewards enjoyed by the generic wildland fire workforce is often totally absent in this environment.

Beyond policy and direction, wildland firefighters possess an ethic and culture that they carry with them to assignments. Working in environments that are dissimilar in values and assumptions, produce stresses not seen during even the longest fire campaigns.

Out-of-region Incident Commanders and Section Chiefs noted the leadership demands associated with keeping up with team needs were greater than any fire assignment previously encountered. Keeping themselves and their teammates healthy and on firm emotional and psychological ground was a paramount duty of Incident Commanders during these assignments. ICs reported spending large amounts of time and effort on attending to the condition and maintenance of the team's psychological health, stress, and morale. Leaders spoke of the emotional toll that the work exacted on some team members, especially when the work was frustrating, unrewarding or disheartening. They also reinforced that having nothing to do when there was so much need all around was very hard on people.

Identity

As with almost all aspects of ground operations discussed earlier, people improvised and generated different outcomes and solutions where there was confusion about such things as chain of command, policy, or coordination responsibilities.

Presumably a facet of the general "whose policy applies?" and "who's in charge?" ambiguity discussed earlier, incident and operations personnel described having difficulty with pockets of individuals adhering to home agency workforce policies. Respondents speculated that messages such as "working for FEMA," "we're on FEMA's money," "FEMA's calling the shots," and "be flexible," were cumulatively interpreted as separation. This interpretation may have had the net effect of communicating to some employees that they had been "given away" to another agency for the mission, or at least that the home agency didn't matter. Managers reported being occasionally exasperated by the way that USFS rules were not being followed and feeling as if the employees had forgotten who was paying them. *Note: Although it is related by root cause, this issue was reported independent of the incidents relating to the "lost" community relations personnel or the policy confusion regarding the application of USFS driver qualifications policies with NWCG cooperators.*

Respondents identified the need for flexibility and adaptability as paramount for these assignments, yet many respondents were unclear about the boundary lines and interrelationships between land agency policy, client policy, and incident management or National Wildland Coordinating Group policy. This brought confusion on the ground about what rules could be ignored, broken, or bent during the 2004 Hurricane Response. Generally, regional management and IMT staff appeared clear on these subjects, but they were also the people most likely to be at the policy decision points. It was widely accepted that each incident tended to yield its own variation as the wheel was reinvented and internal policies shifted.

Experienced personnel reinforced the need for everyone working on the assignment to stay “between the lines” and to remember who they were, what they were there to do, and who they worked for. The 2004 Hurricane Response effort posed challenges to that goal for many responders.

When discussing the role of discipline, perspective and identity in these assignments, ICs reported that not only did they have to brief these realities once, but they had to repeat and reinforce the message every day while on assignment, even to experienced team members. The need for informing, repeating, and reassuring was considered to be one of the biggest differences from the fire environment and is an area where these Incident Commanders spent a lot of their time.

Summary of Lessons Learned – Managing the Unexpected

- *The mature incident management systems and processes used by wildland fire personnel to fight fires do not always apply well to all-risk response efforts.*
- *Respondents stressed how hard it is to bring firefighting personnel around to understand and adapt to the change in thinking required in all-risk environments.*
- *In the early weeks of the response, large numbers of name request resource orders were issued as personnel attempted to exercise control over their environment by bringing in people who were known quantities.*
- *IMTs found themselves having ample opportunities to expand their service beyond the original mission once they were established.*
- *Personnel emphasized the importance of exercising the mental discipline as “Should I do it?”, rather than “Can I do it?”*
- *Hyper-vigilance, caused by stress, resulted in ongoing rumor mills. These sometimes affected operational planning as personnel began to anticipate new mission assignments.*
- *Understanding and keeping in mind the “big picture” was cited by respondents as core to keeping emotions under control and making some sense out of nonsensical situations.*
- *IMT leaders considered the task of keeping themselves and their teammates healthy and on firm emotional and psychological ground a paramount leadership duty of Incident Commanders during these assignments.*
- *Respondents identified the need for flexibility and adaptability as paramount for these assignments, yet many respondents were unclear about the boundary lines and interrelationships between land agency policy, client policy, and incident management or NWCG policy. This brought confusion on the ground about what rules could be ignored, broken, or bent during the 2004 Hurricane Response.*

Section 3: **Issues for Organizational Leaders**

Many of the problems and challenges that wildland fire IMTs faced in the 2004 Hurricane Response effort were the result of systemic disconnects between FEMA and the USFS/NWCG response structures. These produced a wide range of problems and solutions as individuals coped with an unstructured interagency dance. This has remained an ongoing problem that has yet to be resolved in a way that enables firefighting resources to be used in an effective, efficient and appropriate way. The disconnect stems from a combination of factors, but the most prevalent are the inability of FEMA to change and improve quickly, and the assumption by management that wildland fire does not need to.

The future of emergency response in the U.S. has been moving steadily toward the increased involvement of the wildland fire agencies and their Incident Management Teams. FEMA respondents imply that FEMA is more than willing to employ these resources in a variety of missions, and the more the better. The leadership of the Departments of Agriculture and Interior has gone on record as readily endorsing the use of wildland fire resources as part of the Department of Homeland Security response, which has included tasks ranging from exotic disease control, to the 9/11 site logistics, to Space Shuttle recovery activities.

Where once a part-time or occasional occurrence, all-risk emergency response has quickly turned into a growing concern and distraction for fire management personnel. Some feel that situations like the 2004 Hurricane Response, which involved 17 Incident Management Teams and four Area Command Teams, have brought the wildland fire community to a crossroads decision point – a) to perform these missions professionally with full commitment and purpose and in concert with other firefighting duties or b) narrowly limit the exposure and commitment.

Are We “In” or Are We “Out”?

We are victims of our own success. Our “can do” attitude has other agencies turning to us for help....When FEMA goes to ESF#8 (Mass Care) they should call in ESF#4 and ESF#4 should be on site first.
- Area Commander

We have problems with others agreeing to do work that we can't or shouldn't be doing. The Secretary of Agriculture would like us to fix fences and clear orchards, but FEMA can't pay for work like that on private land.
- ESF#4

“We are not organizationally prepared to be doing this work – we need to quit kidding ourselves.”
- Incident Commander

By far the biggest and most salient organizational question emerging from the 2004 Hurricane Response effort was summarized in the phrase, “*Are we in, or are we out?*” Until now, wildland fire has used tried and true firefighting systems and processes to respond to all-risk missions. In some cases, such as the Columbia Shuttle Recovery Mission, respondents report that these systems worked relatively well to meet the mission of conducting ground searches and aircraft management.

There is no disagreement from either wildland fire resources or FEMA that the wildland fire personnel and Incident Management Teams bring value to a national disaster response effort. Many wildland fire respondents, however, questioned the level of effectiveness of their efforts and the costs, both financially and psychologically. Among the respondents in management or leadership roles interviewed, there appears to be no agreement about the proper role of wildland fire personnel in the business of disaster recovery and security response. Doctrinal guidance is scant.

Behind the waste, dysfunction and frustration documented in this and similar predecessor reports, are unresolved questions concerning the National Response Plan, and specifically what operations the wildland fire agencies are prepared to do under it. For several years the USFS has been pulled into service to support an increasingly wide variety of duties under ESF#4, and through NWCG, has pulled in personnel from other wildland fire agencies to assist.

The increasing use and misuse of fire resources during FEMA operations has produced an increasing awareness and self-examination about what the all-risk world really means to the wildland fire agencies and their workforce. If the agencies are “in”, then many questions should be deliberately answered with regard to workforce development and suitability for these assignments, and at the core, the question of whether wildland fire can continue to operate all-risk as an extension of wildland fire operations and doctrine. The size and scope of the 2004 Hurricane Response effort indicates that the current ways of doing business may no longer be viable or appropriate.

Many respondents in this study expressed the desire to see the wildland fire community take a more serious role in preparing for and executing the all-risk FEMA mission, including a commitment to build the policies, tools, doctrine, training, and experience a workforce needs to prosecute the mission correctly and professionally. This need was seen as a national concern – as the regional requirements to provide on-the-job training and information to fill the experience and knowledge gaps has become overwhelming. The definition of the “dance” between FEMA and the wildland fire community will likely need to go far beyond NIMS and IMT operations. A strategic plan is likely necessary to extend the agencies into the new all-risk world in a sustainable manner.

The following content is a composite discussion that was held in many places with many different respondents during the interviewing process, all relating to the larger question about the wildland fire community’s role in the national response structure, and what it means to the wildland fire agency and its people. It was felt that without addressing these issues and questions, the role of wildland fire within these incidents would remain difficult and fraught with problems.

Can Do vs. Should Do

At the root of the discussion is the question of whether firefighters are the best people to be performing FEMA damage assessments, building software spreadsheets to track trucks, and staffing critical care centers. FEMA respondents stated that the critical skill that Incident Management Teams bring to the disaster response effort isn’t so much “incident management expertise”, but rather the presence of a large, quickly deployable, organized workforce of able bodies that comes almost self-contained and is under a command and control structure. This is reflected in the common comments by IMTs that the logistical mission assignments given by FEMA were generally not technically challenging on an incident command skill level.

Across the workforce there is little known as far as the doctrinal boundaries to what wildland fire is willing to do in the support of FEMA. Until this point, mission acceptability has been created on the spot by FEMA with some involvement of the ESF#4 position. In this response effort, Washington D.C.-based managers and directors reportedly crafted ad hoc solutions and missions on both the USFS and FEMA sides, sometimes apart from ESF#4 and other strategic managers.

During the collection effort, interviewers heard disparate philosophies concerning what the wildland fire personnel should be doing, how they should be deployed, and what types of missions they should do. Responses ranged from “We should be taking over FEMA’s job,” to “We shouldn’t be here.” If there is a nationally determined philosophy concerning the wildland fire responder scope of work, it has not been effectively communicated.

Given the increasing demand for IMT participation in national events, the need for defined boundaries on missions and participation should be developed by the national offices of the wildland fire agencies.

Development of All-Risk Doctrine

Abundantly clear is the fact that all-risk assignments can be fundamentally different than the business of firefighting – which has been made relatively manageable and predicable through a long history of specializing, testing, and process evolution. Although ICS is the framework for wildland firefighting, the systems, processes and people that perform the work have also been highly specialized for the firefighting mission. Many of the stories related by participants in the 2004 Hurricane Response indicate that this process and tool specialization is not a good fit for the new emergency response mission.

Respondents were only able to identify a handful of post-incident reports and briefing packages that contributed to doctrine for hurricane response. There is little, if any, doctrinal guidance concerning wildland firefighters participating in all-risk assignments in general, or guidance that delineates what parts of existing firefighting doctrine applies to all-risk situations. Some operations personnel felt that the prospect of shoehorning firefighting doctrine into a hurricane response effort, and then having to make large numbers of exceptions ad hoc, posed a risk that undermined the existing doctrine and firefighting mission.

Following this incident, many participating groups planned to conduct detailed After Action Reviews of their part of the response. Collectively, with this report, they may provide a good foundation from which to begin the development of an all-risk doctrine.

Respondents generally accepted the goal of importing ICS into the all-risk environment, but stopped short of saying that wildland firefighting methods and standards were appropriate for these events.

Beyond meeting the needs of the workforce, the most salient and powerful outcome of doctrine development could be the smoothing and formalizing of the operations between FEMA and the wildland fire agencies. Formalized all-risk doctrine could form the base for process development and FEMA educational efforts, and potentially elevate the FEMA relationship beyond a basis of personal relationships only.

Policy Development

Apart from mission capability (can do), are the questions concerning the ethics, liability, legality and sustainability of mobilizing the agency's wildland firefighter workforce for national response duty as a standard practice (should do). Many respondents expressed discomfort with the way that fire policies and practices were being globally applied to work that was not firefighting. Disagreements about what NWCG practices applied and where agency policy trumped NWCG were reported.

Dissatisfaction expressed with the base-8 burden being placed on the local units, seemingly arbitrary funding limitations, and discrepancies between FEMA and USFS pay for similar tasks, was a cause of consternation with employed resources. Gaps and incompatibilities between financial and procurement systems and policies cause ongoing adaptation and waste. One respondent posed the question, "Will it really do us much good to get FEMA into ICS, if the ordering and reporting systems are still [dysfunctional]?"

Mission and Risk Integration

Several respondents posed general questions relating to what would have happened had an incident of this magnitude occurred during a busy fire season. As an all-risk player, the wildland fire agencies may soon be faced with balancing an increasing responsibility for a non-cyclical national emergency response with traditional seasonal firefighting duties.

Beyond impacts to firefighting resource availability is the risk that the all-risk mission poses to other preparedness, fuels reduction, prescribed fire, and non-fire missions that have not diminished. The resource drains on the workforce in the forms of availability and fatigue could be substantial. Local budgets could be considerably impacted in the wrong year. Respondents reported that national emergency responses are generally not included as part of agency strategic planning processes.

Training and Preparedness

The USFS Southern Regional Operations and the IMTs located in the southeastern U.S. have spent considerable time and effort to collect lessons learned from their work in prior hurricane efforts. USFS Regional Operations spent extensive time during the response effort in providing just-in-time familiarization training to arriving resources. Similarly, departing IMTs spent extra time to brief and sometimes train incoming personnel to the situation and the processes emplaced to date. This training burden was substantial. These activities were primarily directed at IMT staff, which then passed some of the information on to the team in subsequent briefings. The effectiveness of these activities was hard to measure, but the scope was admittedly small.

Without exception, the training need for serving in these environments was voiced, but suggestions advocated many possible solutions. Some respondents advocated briefing guides or checklists, while others suggested entire training programs or certifications.

Several IMT respondents suggested that the S-520 Advanced Incident Management course be modified to include all-risk or hurricane scenario, however questions were raised about support requirements for personnel who do not attend this training program, including Type 2 IMT personnel.

ESF#4 training and certification was also widely indicated.

Beyond technical training, skills in effective communication, leadership and conflict resolution were highly valued during the incident, indicating that all-risk training programs may need to include material related to these subjects. The question of whether all-risk training curriculums should be part of the NWCG core training mandate was not discussed, but remains a question for management to consider.

FEMA Training and Presenting a Unified Front

Some FEMA respondents openly remarked that the USFS and other wildland fire agencies needed to educate FEMA operations on what missions IMTs could accomplish, and how best to order and employ them in these incidents. While this education responsibility was widely accepted, the contents of this educational mission do not appear to be well understood or consistent.

In the 2004 Hurricane Response, FEMA education activities were conducted ad hoc, and were initiated based upon the strength of previously established personal relationships. The “example” of ICS implemented by various IMTs in the response varied, as discussed earlier, but it is unknown if FEMA personnel noticed the inconsistency. In most cases, FEMA training or mentoring activities were not coordinated well within the USFS. This sometimes resulted in unintended consequences when non-standard practices used to facilitate training were questioned by other operational units.

Analyst Comments—Forging a Larger Solution

At one time, the wildland fire community was a loose collection of agencies and organizations working in fire part-time with few common processes and procedures. Until meaningful standards were put into place, firefighting was a business built primarily on personal relationships. Over the span of 40 or 50 years, wildland fire agencies have built common doctrine and support systems for training, standards, processes, and the science of fighting wildland fire, as well as for managing long-term and large incidents. To support this transition, the wildland fire community built a professional core of personnel specifically to handle fire operations. More than 15,000 full-time and 25,000 part-time operations personnel now handle these operations.

FEMA became involved in emergency response in 1993. It consists of 2,500 full-time employees and 5,000 part-time reservists, most of who are not focused in emergency response operations. These reservists are citizens from varied walks of life, who leave their jobs and families to participate in emergency relief activities. In the 2004 Hurricane Response, wildland fire IMTs reported to FEMA leaders who included “real life” car salesmen, managers, merchants, and retired fire chiefs. Understandably, this type of pool is widely varied in incident management experience, technical and interpersonal skills, leadership, work ethic, and general ability. They do not have the opportunities of their wildland fire counterparts to train and to participate regularly in operations. This ad hoc workforce situation also tends to undermine the ability of FEMA to set operational and qualification standards, develop culture, and learn from past experiences and educate personnel accordingly. Given its roots, it is understandable that FEMA’s organization and doctrine is less mature and more transitory than that of the wildland fire community or the military. Waiting for FEMA to change to “be like wildland fire” is using hope as a plan.

In the 2004 Hurricane Response, FEMA was taken beyond the limits of its capacity and given the responsibility for managing unprecedented numbers of wildland fire resources. The opportunity for friction and disappointment was omnipresent. Although extreme in an historical context, the incident echoes past FEMA-wildland fire cooperative experiences, and it is a likely glimpse of the future as the use of wildland fire resources continues to increase.

Wildland fire responders participating in the 2004 Hurricane Response effort expressed widespread dissatisfaction with the way that FEMA utilized personnel and IMTs. In some cases, responders voiced disappointment in the unprofessional conduct of some individuals working for FEMA. Given FEMA’s design, construction, and culture, wildland fire’s expectation of performance is mismatched against FEMA’s realistic ability to perform. These unmet expectations are a source of ongoing dissatisfaction and frustration, which has, by many accounts, existed for years.

For the future, the parent departments of the wildland fire agencies have choices. First, to let the situation evolve and hope that NIMS compliance will soften the problem. Second, they can reduce involvement in disaster assistance because it does not represent an effective use of wildland fire resources or personnel. Third, they can go “in” and take a more proactive and planned role in the emergency response effort. Fourth, as a last option, they can achieve “success” through lowered expectations.

Expecting NIMS and the National Response Plan to resolve these issues seems a bureaucrat’s natural choice, and appears to be the path of choice presently. While NIMS will hopefully correct some of the chain of command and authority issues, it will not address other core operating practices about how and why wildland fire resources are used in disaster events. The soon-to-be-

released National Response Plan (*NRP*) will undoubtedly attempt to address the mechanisms that activate and assign mission resources to some extent. It is unknown how the *NRP* will affect the reality on the ground, but without additional doctrine, SOPs or agreements beyond the *NRP*, FEMA will probably continue to underutilize Type I Incident Management Teams to execute relatively simple staging and distribution operations. As long as FEMA unleashes goods and materials to the ground similar to the way they do now, a simple logistical staging area will remain an “incident” to be managed, and IMTs will find themselves “managing” organizational dysfunction as much as do the technical mission.

Also unknown is whether ICS can be truly adopted by FEMA in a way that fundamentally changes their operating practices. Although wildland fire respondents felt that having FEMA adopt ICS would be very helpful, there was less confidence that FEMA could adopt the cultural values and changes that are at the heart of successful execution of ICS in a multi-agency environment. Some of the adoption of ICS amounts to a willingness to step away from the positional rank framework into a competency-based qualification system. Although FEMA is relatively small, the transitory nature of the workforce will likely mean that any change will be slow, even if forcefully directed.

The development and release of NIMS and the *NRP* will not answer the larger organizational question of “in or out.” “Out” is an unlikely option given the past commitments and the intellectual monopoly that wildland fire has on executing long-term, large-scale strategic incident management. Limiting the use of individual fire resources might be plausible, but it is doubtful that the IMTs could be freed from these duties for several years.

Getting “In” the response business in a more committed and professional manner would mean significant work and changes that could extend far beyond the changes required for NIMS compliance. These changes could extend to workforce levels, training and qualification requirements, software, financial and management systems, and national SOPs and protocols with regard to mission suitability and resource use. It is clear that this coordination, education, and cooperation effort must come from the ones who are suffering under the current system, and can best engineer the solutions that will work—the agencies that fight wildland fire.

Over the past years there have been many attempts by individual IMT members and managers to reach out to FEMA and provide guidance and training. Many in FEMA have welcomed and support this, but generally these efforts have collectively failed to provide long-term solutions—partly because of the lack of wildland fire coordination and mandate, and partly because of FEMA’s ongoing organizational instability and immaturity.

Beyond the option of doing something, there is always the option of doing nothing and lowering expectations of FEMA so that disappointment is avoided. This option, while easiest to achieve, is the least palatable to swallow, especially for the wildland fire culture and those personnel who follow.

FEMA will remain in need of guidance and assistance on incident practices because the core of successful ICS implementation is not rooted in process understanding so much as it is in culture, technique, and attitude. However, these are generally not taught in ICS training courses. The art of implementing ICS still must be taught to other agencies, and, whether “in” or “out,” wildland fire will have an ongoing role in that educational effort, organized or not. All options are costly, but if “change” is the selected course of action, then the onus is on the wildland fire community and the parent departments to start it, guide it, and sustain it—even if FEMA is technically still in charge.

—L. McDonald